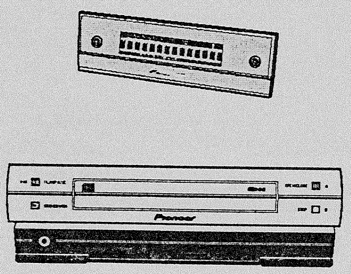
Pioneer

Service Manual



ORDER NO.
RRV2470

STEREO CD TUNER

XC-L11

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model XC-L11	Power Requirement	Remarks
ZVYXJ	○	DC power supplied from other system component	

- This products are component of systems. This product does not operate normally by itself. Please connect it to the STEREO CD TUNER XC-L11 and the STEREO POWER AMPLIFIER M-L11, for adjustment and operation inspection.
- This product is a system(s) component.
  Be sure to connect it to the prescribed system component(s), otherwise damage may result.

Component	Model		Service manual	Remarks
STEREO CD TUNER	XC-L11		RRV2470	This manual.
STEREO POWER AMPLIFIER	M-L11		RRV2479	
SPEAKER SYSTEM	S-L11-LRW	—	RRV2483	
	—	S-L11-Q-LRW	RRV2484	
STEREO CASSETTE DECK	CT-L11		RRV2471	
MINIDISC RECORDER	MJ-L11		RRV2472	

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PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER ELECTRONIC NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

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T – ZZR JUNE 2001 Printed in Japan

1. SAFETY INFORMATION

LITHIUM BATTERY NOTICE

WARNING!
Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.

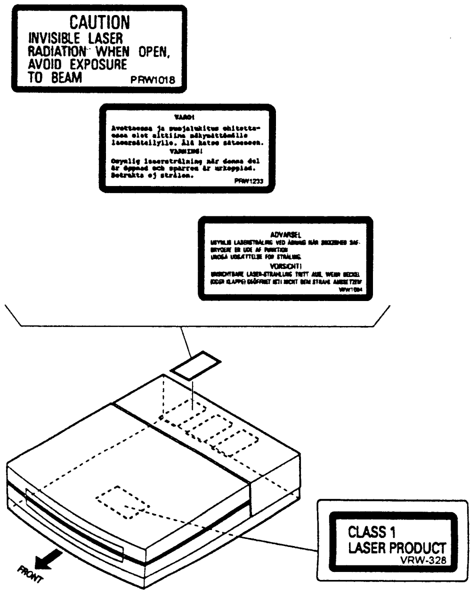
This warning is stated on the product or in the operating instructions. When replacing the lithium batteries, follow the note below.
Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.
The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note: The lithium battery installation position is shown in the exploded views.

ADVARSEL!
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Denne advarsel or angivet på produktet eller i brugsvejledningen. Ved udskiftning af lithium batterierne følges nedenstående anveisning.
Batterierne må kun udskiftes med batterier af samme type og mærke.

LABEL CHECK


CAUTION
INVISIBLE LASER
RADIATION WHEN OPEN,
AVOID EXPOSURE
TO BEAM
PRW1018
VARO!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.
VARNING!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.
PRW1233
ADVARSEL
VORSICHT!
CLASS 1
LASER PRODUCT
VRW-328
FRONT

Additional Laser Caution

1. Laser Interlock Mechanism
   The loading position detect switch (in CD mechanism assembly) is set to "CLMP ON(CD CLOSE)" (ON:low level,OFF:high level) position, the system control IC(IC5501) get the "CLMP" signal, and hand the laser "LDON" signal to IC1101.
   Then a laser diode can be lighted except when the level of signal CLMP is low.
   The interlock also does not function in the test mode*.
   Laser diode oscillation will continue, if pin 1 of TA2150FN (IC1101) on the RF AMP is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q1101 are shorted to each other (fault condition).
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* : Refer to page 34.

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

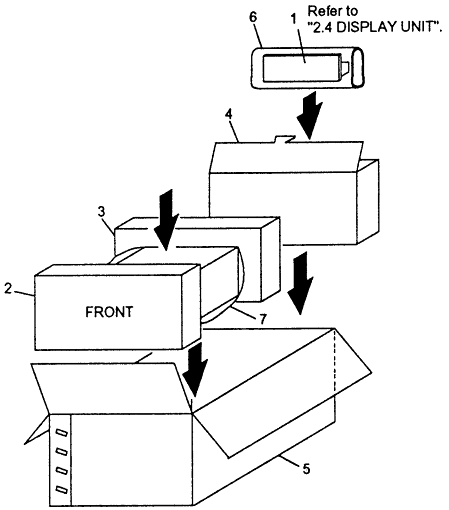
LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mW
WAVELENGTH: 780 – 785 nm

---

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

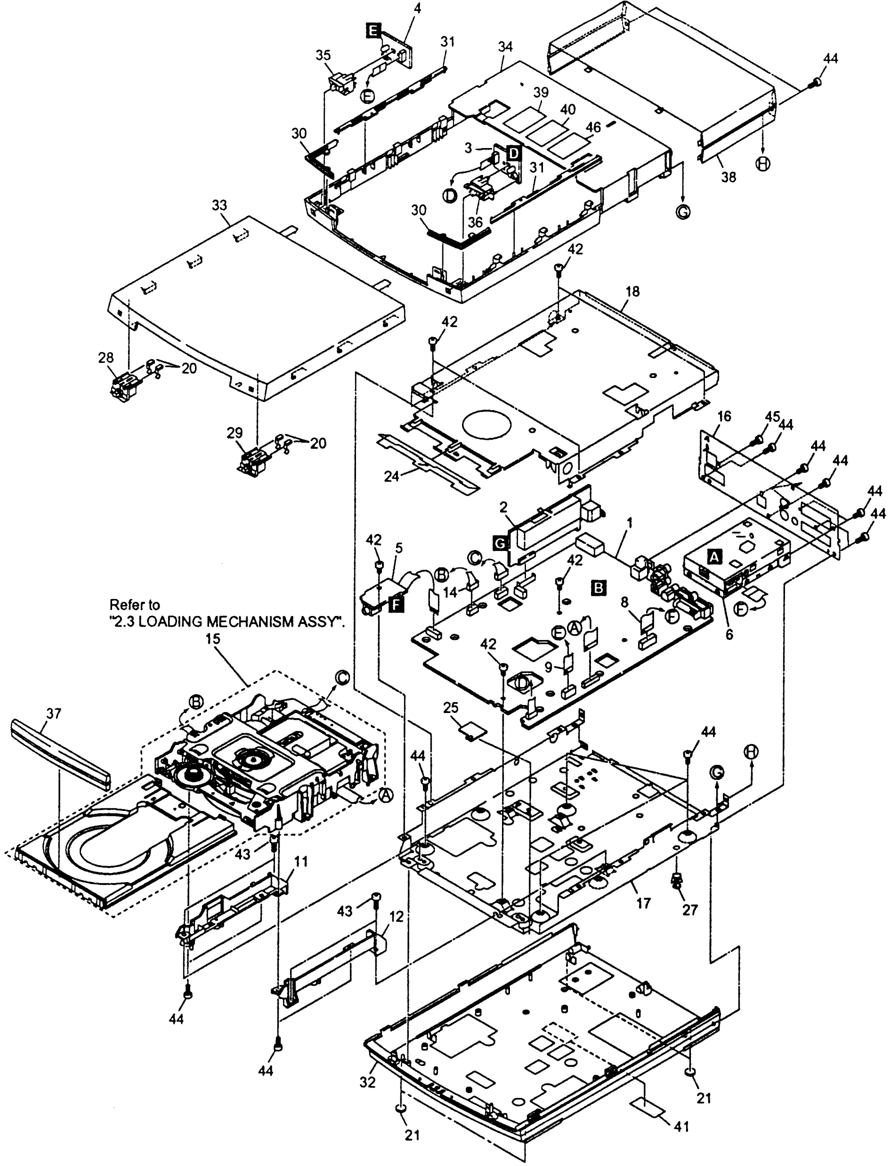
2.1 PACKING


6
1
Refer to "2.4 DISPLAY UNIT".
4
3
2
FRONT
7
5

• PACKING PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY UNIT	AXX7107
	2	Front Pad	AHA7340
	3	Rear Pad	AHA7341
	4	Spacer NS2001	AHB7056
	5	Packing Case CD/Y	AHD7988
	6	Packing Sheet	AHG7073
	7	Seat	Z23-007

2.2 EXTERIOR


4
E
31
35
34
44
39
40
46
30
3
D
31
D
E
38
H
G
33
30
36
42
18
42
28
20
29
20
24
16
45
44
44
44
44
44
2
G
1
42
5
B
C
42
A
14
B
F
8
F
F
E
A
6
42
9
D
C
B
37
25
44
44
H
G
A
43
11
17
27
43
12
44
44
32
21
41
21

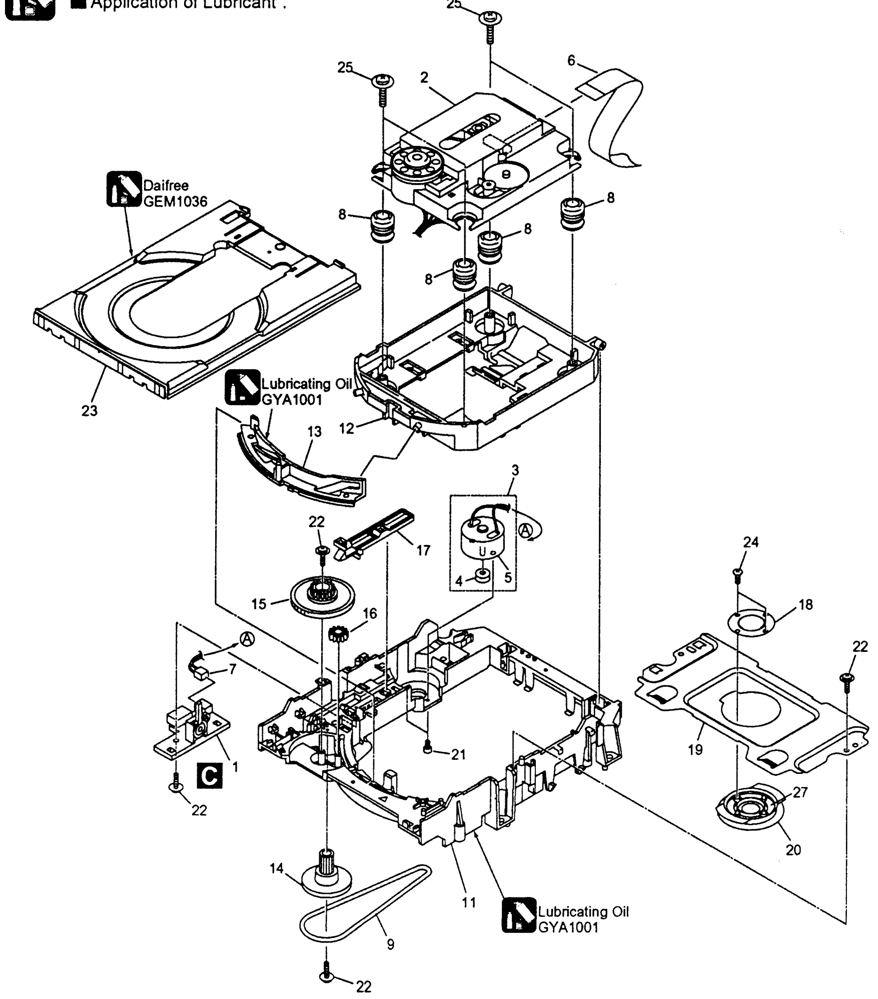
Refer to
"2.3 LOADING MECHANISM ASSY".
15

• EXTERIOR PARTS LIST

Mark	No.	Description	Part No.
	1	MOTHER ASSY	AWU7836
	2	FLAC ASSY	AWU7837
	3	KEYR ASSY	AWU7838
	4	KEYL ASSY	AWU7839
	5	HP ASSY	AWU7840
	6	FM/AM TUNER MODULE	AXQ7229
	7	• • • • •	
	8	13P FFC/60V	ADD7319
	9	9P FFC/60V	ADD7321
	10	• • • • •	
	11	Adapter12 L	ANW7231
	12	Adapter12 R	ANW7232
	13	• • • • •	
	14	Connector Ass'y	PG05KK-E07
NSP	15	Loading Mecha. Ass'y	AXA7101
	16	Rear Panel	ANC8001
NSP	17	Bottom Plate	ANF7027
NSP	18	Top Plate	ANF7028
	19	• • • • •	
	20	Sensor Plate	ANG7360
	21	Leg	AEB7090
	22	• • • • •	
	23	• • • • •	
	24	Lead Barrier	AEC7361
	25	Wire Barrier	AEC7379
	26	• • • • •	
NSP	27	PC Support	VEC1749
	28	Sensor Button L	AAD7622
	29	Sensor Button R	AAD7623
	30	Illuminate Lens	AAK7896
	31	Side Line	AAP7088
	32	Bottom Base	AMA7025
	33	Top Panel 1	AMB7779
	34	Top Panel 2	AMB7755
	35	Button L Assy	AXG7110
	36	Button R Assy	AXG7111
	37	Tray Cap Assy	AXG7112
	38	Bonnet	ANE7270
	39	Caution Label	PRW1018
	40	Caution Label	PRW1233
NSP	41	Caution Label	VRW-328
	42	Screw	BBZ30P060FMC
	43	Screw	BBZ30P100FMC
	44	Screw	BPZ30P080FZK
	45	Screw	PSC30P080FNI
	46	Caution Label	VRW1094

2.3 LOADING MECHANISM ASSY

Note :
Refer to
" ■ Application of Lubricant".

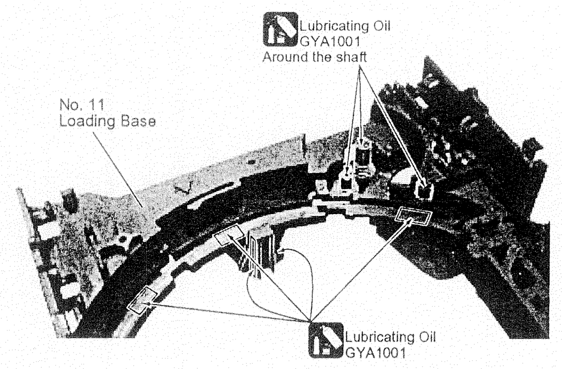

25
25
2
6
Daifree
GEM1036
8
8
8
8
23
Lubricating Oil
GYA1001
13
12
3
Ⓐ
22
17
4
5
24
18
15
16
22
Ⓐ
7
C
1
22
21
19
27
20
14
11
Lubricating Oil
GYA1001
9
22

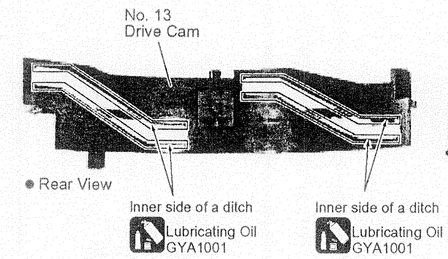
• LOADING MECHANISM ASSY PARTS LIST

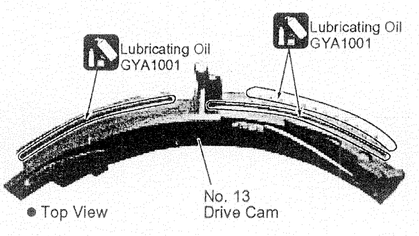
Mark	No.	Description	Part No.
NSP	1	LOAB Assy	VWG2279
	2	CD Traverse Mechanism	VAM2202/03
	3	Loading Motor Assy	VXX2505
	4	Motor Pulley	PNW1634
	5	Carriage DC Motor / 0.3W	PXM1027
	6	Flexible Cable (15P)	ADD7317
	7	Connector Assy 2P	VKP2253
	8	Float Rubber	AEB7227
	9	Belt	VEB1330
	10	• • • • •	
	11	Loading Base	VNL1917
	12	Float Base CD	ANW7233
	13	Drive Cam	VNL1919
	14	Gear Pulley	VNL1921
	15	Loading Gear	VNL1922

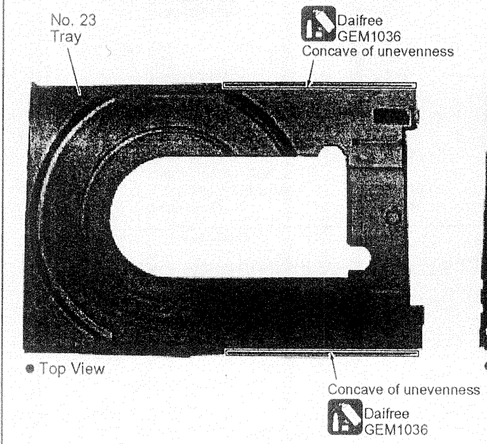
Mark	No.	Description	Part No.
	16	Drive Gear	VNL1923
	17	SW Lever	VNL1925
	18	Clamper Plate CD	ANB7261
	19	Bridge	VNE2252
	20	Clamper CD	ANW7234
	21	Screw	JGZ17P028FMC
	22	Screw	Z39-019
	23	Tray	VNL1920
	24	Screw	PBA1069
	25	Screw	ABA7069
	26	• • • •	
	27	Clamp Magnet	AMG7006

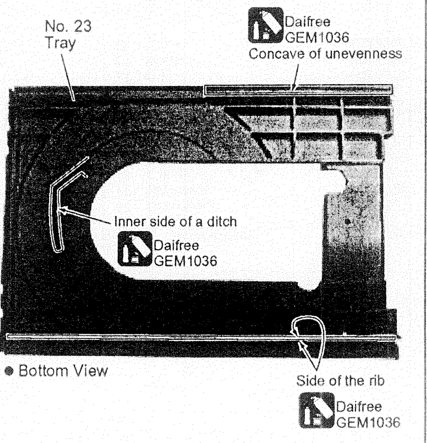
Application of Lubricant


Lubricating Oil
GYA1001
Around the shaft
No. 11
Loading Base
Lubricating Oil
GYA1001

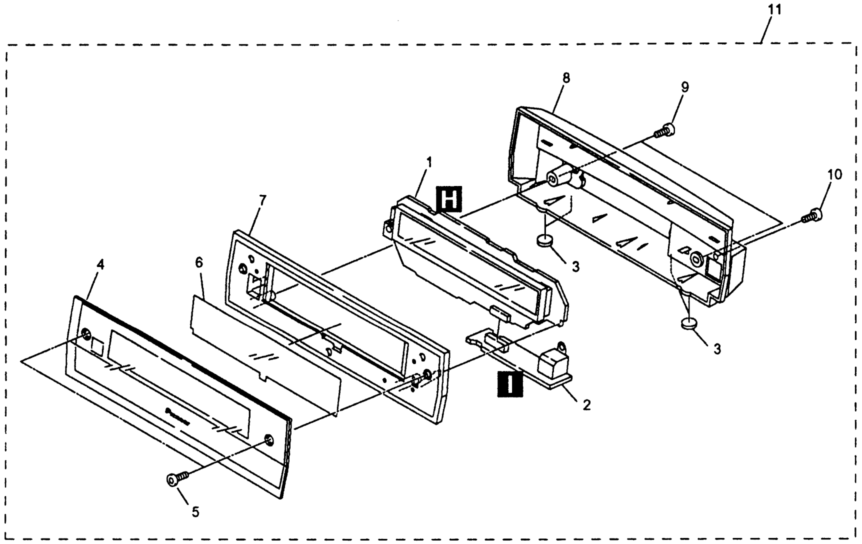

● Rear View
No. 13
Drive Cam
Inner side of a ditch
Lubricating Oil
GYA1001
Inner side of a ditch
Lubricating Oil
GYA1001


● Top View
Lubricating Oil
GYA1001
Lubricating Oil
GYA1001
No. 13
Drive Cam


● Top View
No. 23
Tray
Daifree
GEM1036
Concave of unevenness
Concave of unevenness
Daifree
GEM1036


● Bottom View
No. 23
Tray
Daifree
GEM1036
Concave of unevenness
Inner side of a ditch
Daifree
GEM1036
Side of the rib
Daifree
GEM1036

2.4 DISPLAY UNIT

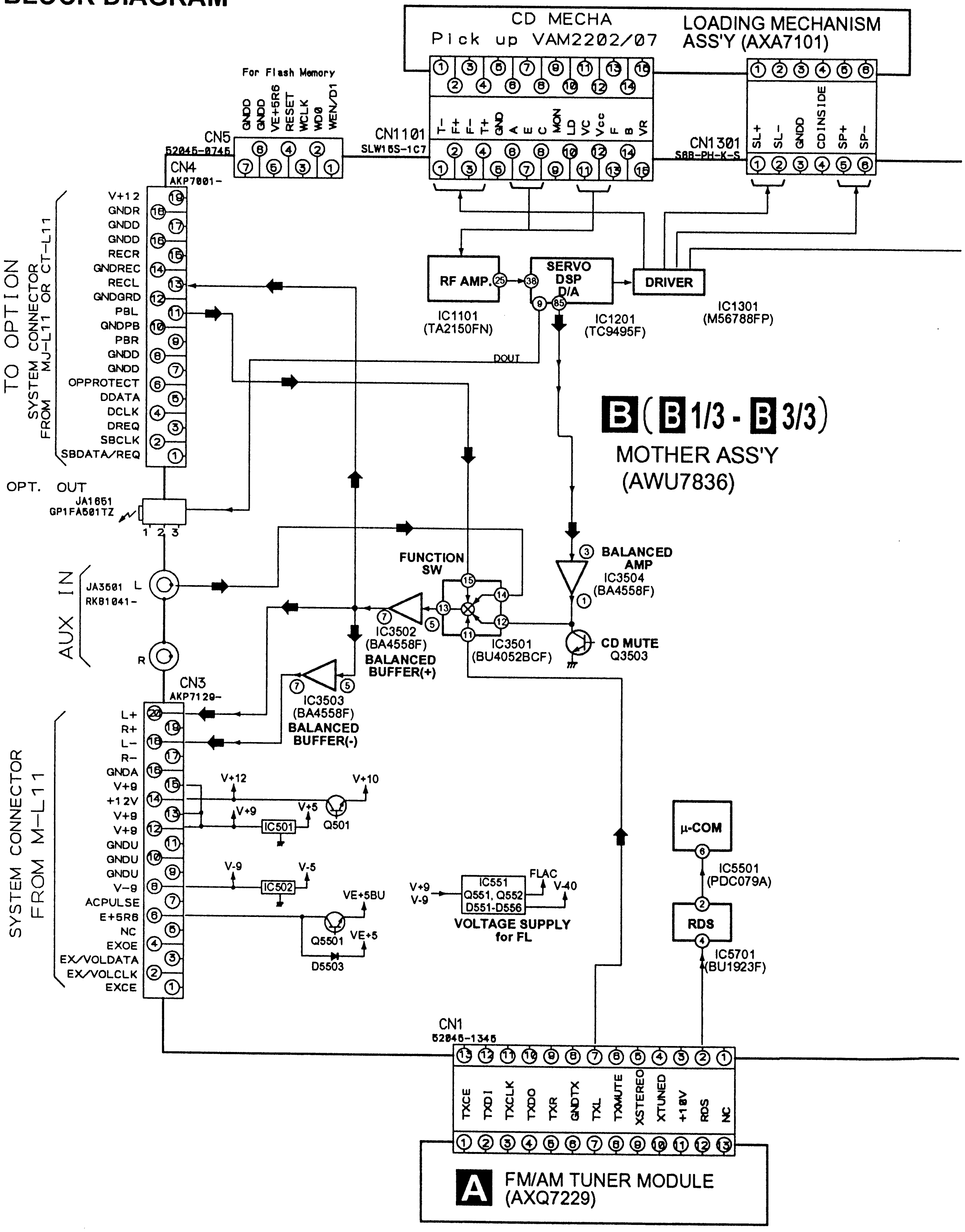


• DISPLAY UNIT PARTS LIST

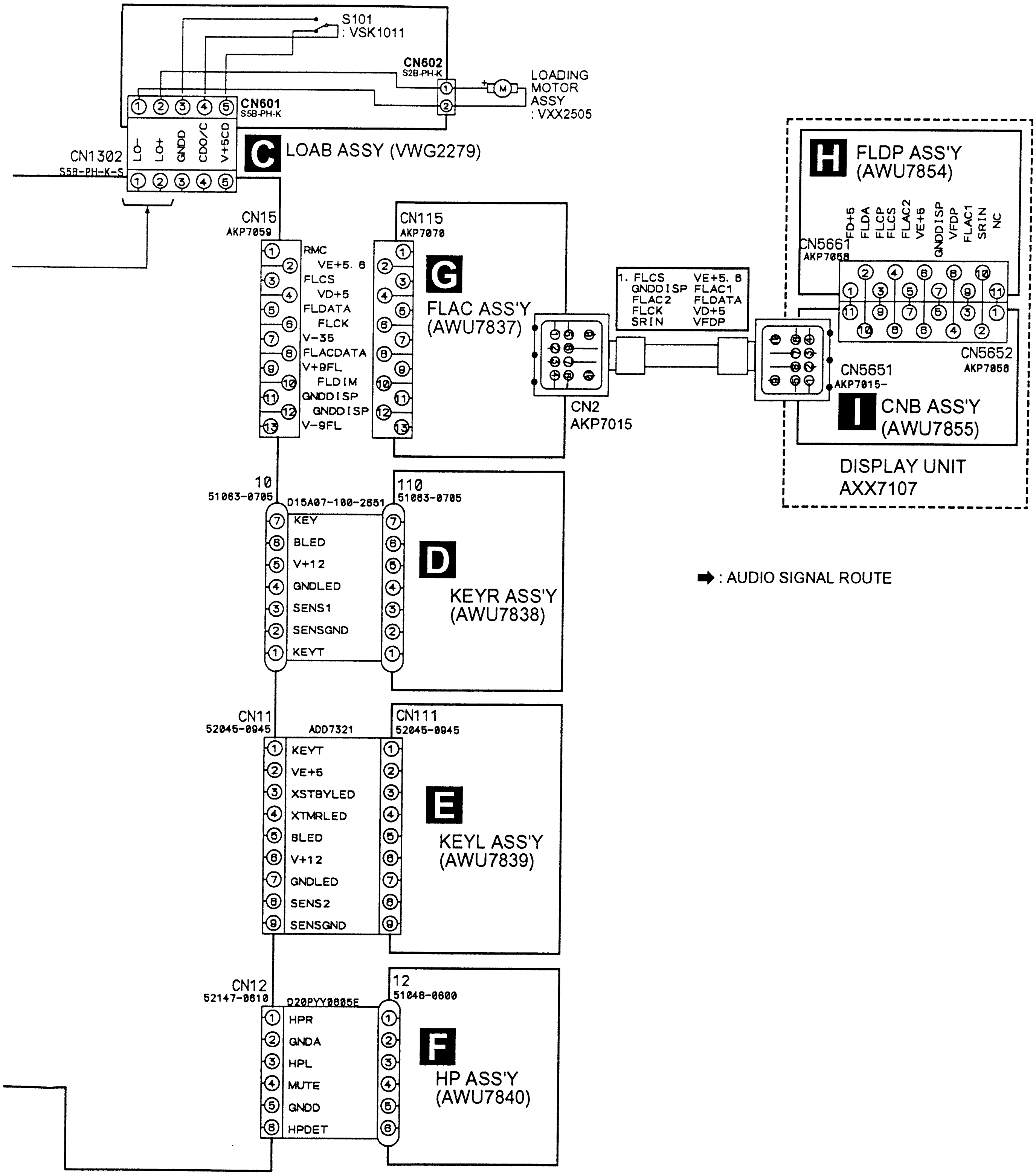
Mark	No.	Description	Part No.
	1	FLDP ASSY	AWU7854
	2	CNB ASSY	AWU7855
	3	Leg	AEB7090
	4	Window	AAK7889
	5	Deco Screw	ABA7072
	6	FL Filter	AEC7195
	7	Display Panel	AMB7750
	8	Display Cover	AMC7048
	9	Screw	BPZ30P080FZK
	10	Screw	PSC30P080FNI
	11	DISPLAY UNIT	AXX7107

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

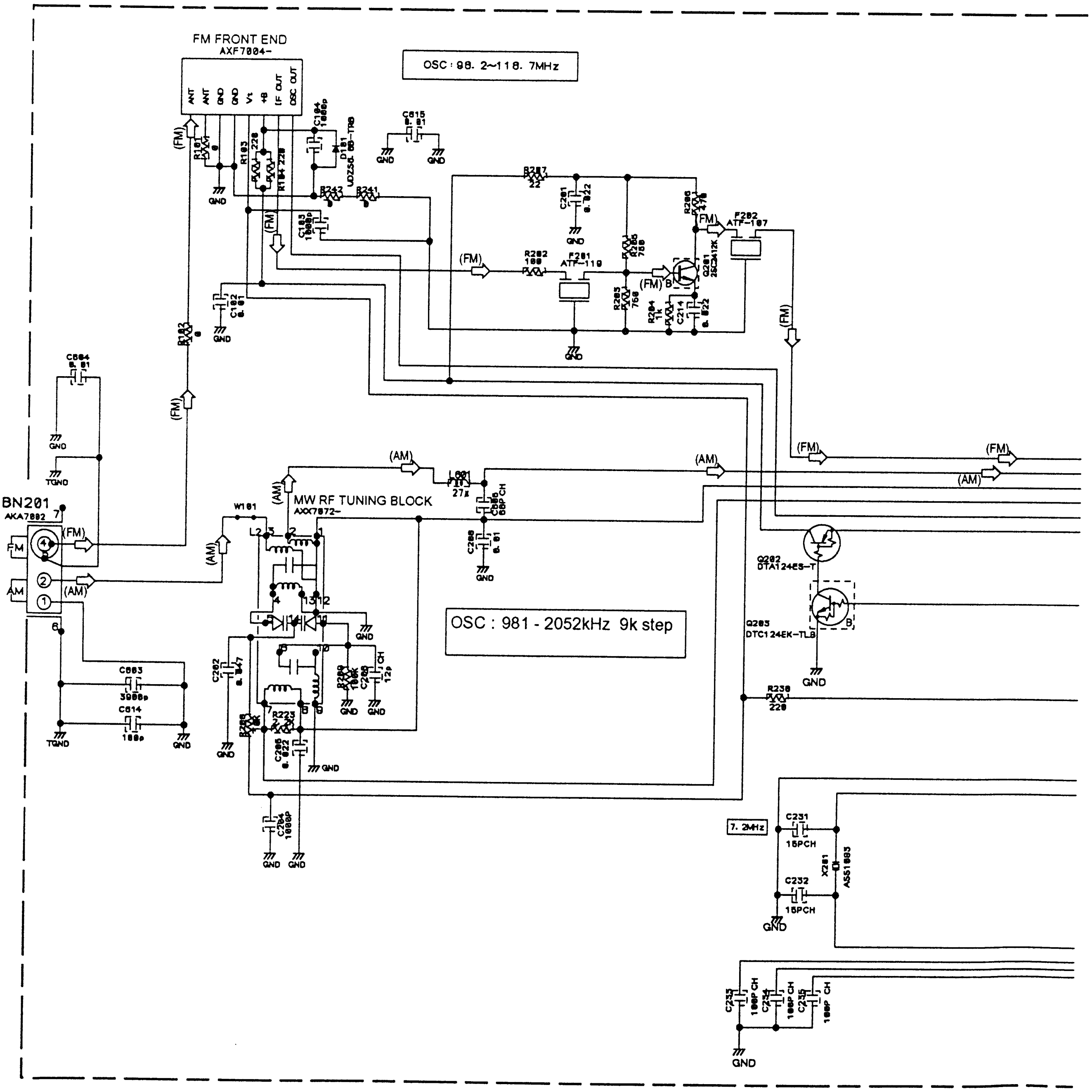

CD MECHA
Pick up VAM2202/07
LOADING MECHANISM ASS'Y (AXA7101)
For Flash Memory
GNDD
GNDD
VE+5R6
RESET
WCLK
WD0
WEN/D1
CN5
52045-0745
CN4
AKP7001-
CN1101
SLW15S-1C7
T−
F+
F−
T+
GND
A
E
C
MON
LD
VC
Vcc
F
B
VR
CN1301
S6B-PH-K-S
SL+
SL−
GNDD
CDINSIDE
SP+
SP−
RF AMP.
IC1101
(TA2150FN)
SERVO DSP D/A
IC1201
(TC9495F)
DRIVER
IC1301
(M56788FP)
DOUT
TO OPTION
SYSTEM CONNECTOR FROM MJ-L11 OR CT-L11
V+12
GNDR
GNDD
GNDD
RECR
GNDREC
RECL
GNDGRD
PBL
GNDPB
PBR
GNDD
GNDD
OPPROTECT
DDATA
DCLK
DREQ
SBCLK
SBDATA/REQ
OPT. OUT
JA1651
GP1FA501TZ
B (B 1/3 - B 3/3)
MOTHER ASS'Y
(AWU7836)
AUX IN
JA3501
RKB1041-
L
R
FUNCTION SW
IC3501
(BU4052BCF)
IC3502
(BA4558F)
BALANCED BUFFER(+)
IC3503
(BA4558F)
BALANCED BUFFER(-)
BALANCED AMP
IC3504
(BA4558F)
CD MUTE
Q3503
CN3
AKP7129-
SYSTEM CONNECTOR FROM M-L11
L+
R+
L−
R−
GNDA
V+9
+12V
V+9
V+9
GNDU
GNDU
GNDU
V−9
ACPULSE
E+5R6
NC
EXOE
EX/VOLDATA
EX/VOLCLK
EXCE
V+12
V+10
V+9
V+5
IC501
Q501
V-9
V-5
IC502
VE+5BU
VE+5
Q5501
D5503
V+9
V-9
IC551
Q551, Q552
D551-D556
FLAC
V-40
VOLTAGE SUPPLY for FL
μ-COM
IC5501
(PDC079A)
RDS
IC5701
(BU1923F)
CN1
52045-1345
TXCE
TXDI
TXCLK
TXDO
TXR
GNDTX
TXL
TXMUTE
XSTEREO
XTUNED
+10V
RDS
NC
A FM/AM TUNER MODULE
(AXQ7229)

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".


S101
: VSK1011
CN602
S2B-PH-K
LOADING
MOTOR
ASSY
: VXX2505
CN601
S5B-PH-K
LO-
LO+
GNDD
CDO/C
V+5CD
C
LOAB ASSY (VWG2279)
CN1302
S5B-PH-K-S
CN15
AKP7059
RMC
VE+5. 6
FLCS
VD+5
FLDATA
FLCK
V-35
FLACDATA
V+9FL
FLDIM
GNDDISP
GNDDISP
V-9FL
CN115
AKP7070
G
FLAC ASS'Y
(AWU7837)
CN2
AKP7015
1. FLCS VE+5. 6
GNDDISP FLAC1
FLAC2 FLDATA
FLCK VD+5
SRIN VFDP
H
FLDP ASS'Y
(AWU7854)
CN5661
AKP7058
FD+5
FLDA
FLCP
FLCS
FLAC2
VE+6
GNDDISP
VFDP
FLAC1
SRIN
NC
CN5652
AKP7058
CN5651
AKP7015-
I
CNB ASS'Y
(AWU7855)
DISPLAY UNIT
AXX7107
10
51083-0705
D15A07-100-2651
110
51083-0705
KEY
BLED
V+12
GNDLED
SENS1
SENSGND
KEYT
D
KEYR ASS'Y
(AWU7838)
➡ : AUDIO SIGNAL ROUTE
CN11
52045-0945
ADD7321
CN111
52045-0945
KEYT
VE+5
XSTBYLED
XTMRLED
BLED
V+12
GNDLED
SENS2
SENSGND
E
KEYL ASS'Y
(AWU7839)
CN12
52147-0610
D20PYY0605E
12
51048-0600
HPR
GNDA
HPL
MUTE
GNDD
HPDET
F
HP ASS'Y
(AWU7840)

3.2 FM/AM TUNER MODULE

A FM/AM TUNER MODULE (AXQ7229)


FM FRONT END
AXF7004-
ANT
ANT
GND
GND
Vt
+B
IF OUT
OSC OUT
OSC : 98. 2~118. 7MHz
C615 0. 01
GND
GND
(FM)
R101 0
GND
R103 220
R104 220
C104 1000p
D101 UDZS6. 8B-TRB
R243 0
R241 0
(FM)
C103 1000p
C102 0. 01
GND
R102 0
R207 22
C201 0. 022
GND
R206 470
(FM)
F202 ATF-107
(FM)
R202 100
F201 ATF-110
R205 750
R203 750
(FM) B
Q201 2SC3412K
R204 1k
C214 0. 022
GND
(FM)
C604 0. 01
GND
TGND
(FM)
(AM)
L601 27μ
C605 68P CH
(AM)
MW RF TUNING BLOCK
AXX7072-
W101
BN201
AKA7002
7
FM
(FM)
4
3
2
AM
(AM)
1
6
(AM)
L2
3
2
1
4
13
12
5
14
11
6
10
7
8
9
C200 0. 01
GND
(FM)
(FM)
(AM)
(AM)
Q202 DTA124ES-T
Q203 DTC124EK-TLB
B
GND
OSC : 981 - 2052kHz 9k step
C202 0. 047
GND
R209 100K
C208 12p CH
GND
GND
C603 3900p
C614 100p
TGND
GND
R208 1K
R223 2. 2K
C205 0. 022
GND
C204 1000P
GND
GND
R230 220
7. 2MHz
C231 15PCH
X201 AS51003
C232 15PCH
GND
C233 100P CH
C234 100P CH
C235 100P CH
GND

Notes

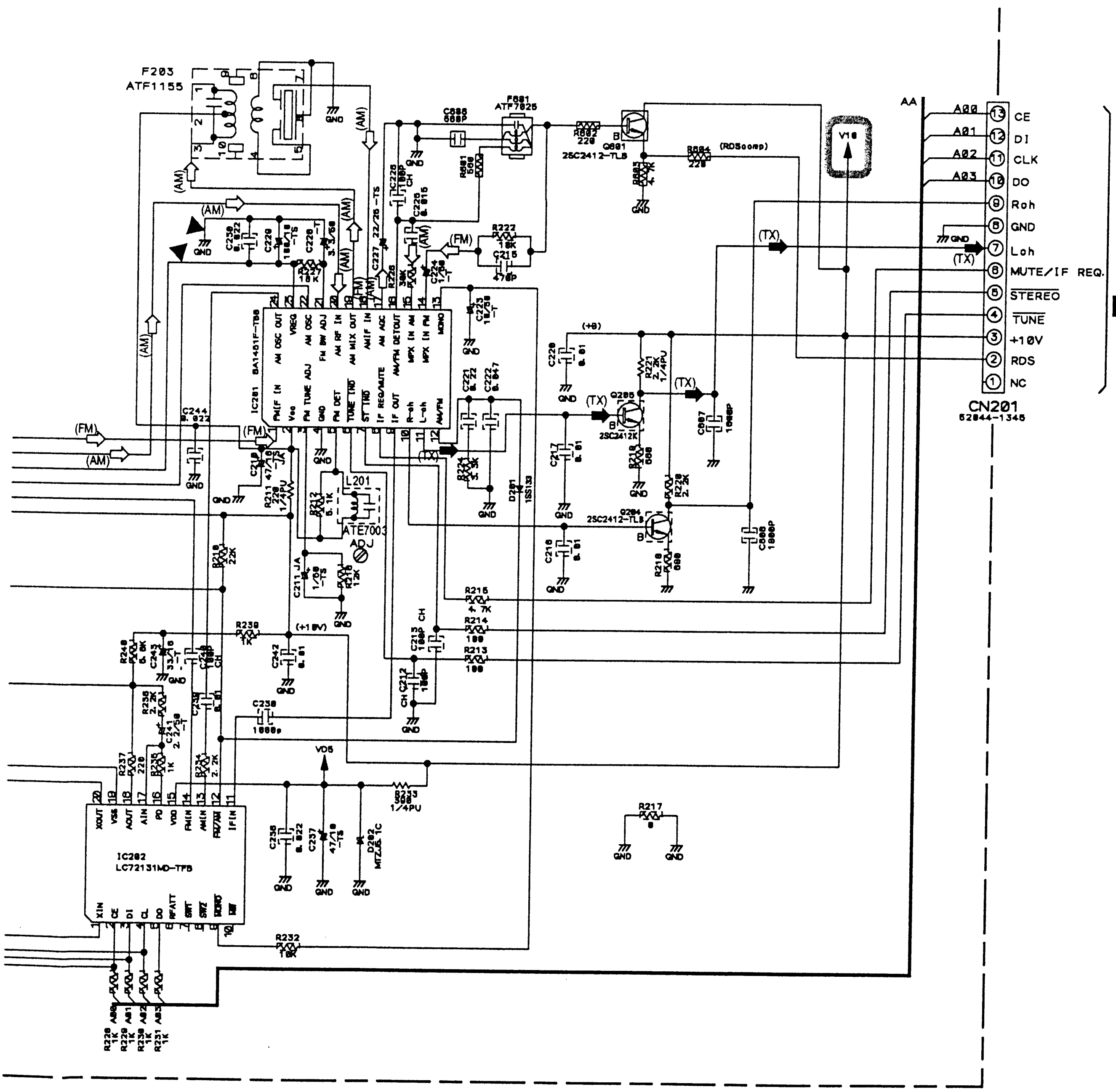
1. RESISTORS
   Indicated in Ω, 1/16W±5% Tolerance unless otherwise noted K;kΩ, M;MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE (V) unless otherwise noted P;PF.
3. DIODES
   No mark diode is 1SS133.

: The power supply is shown with the marked box.

(TX) ➡ : AUDIO SIGNAL ROUTE (TUNER)

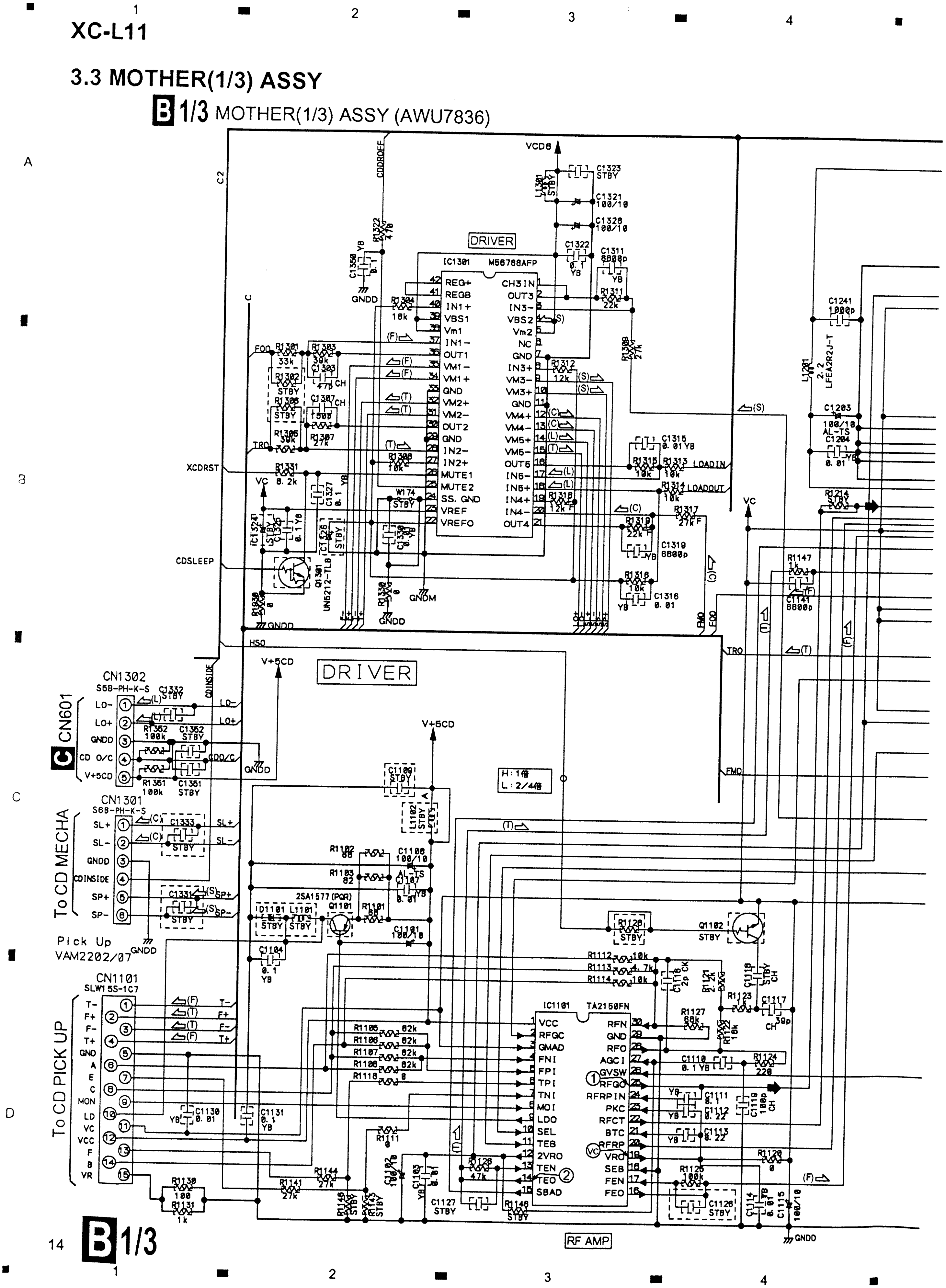
(AM) ⇨ : AM SIGNAL ROUTE

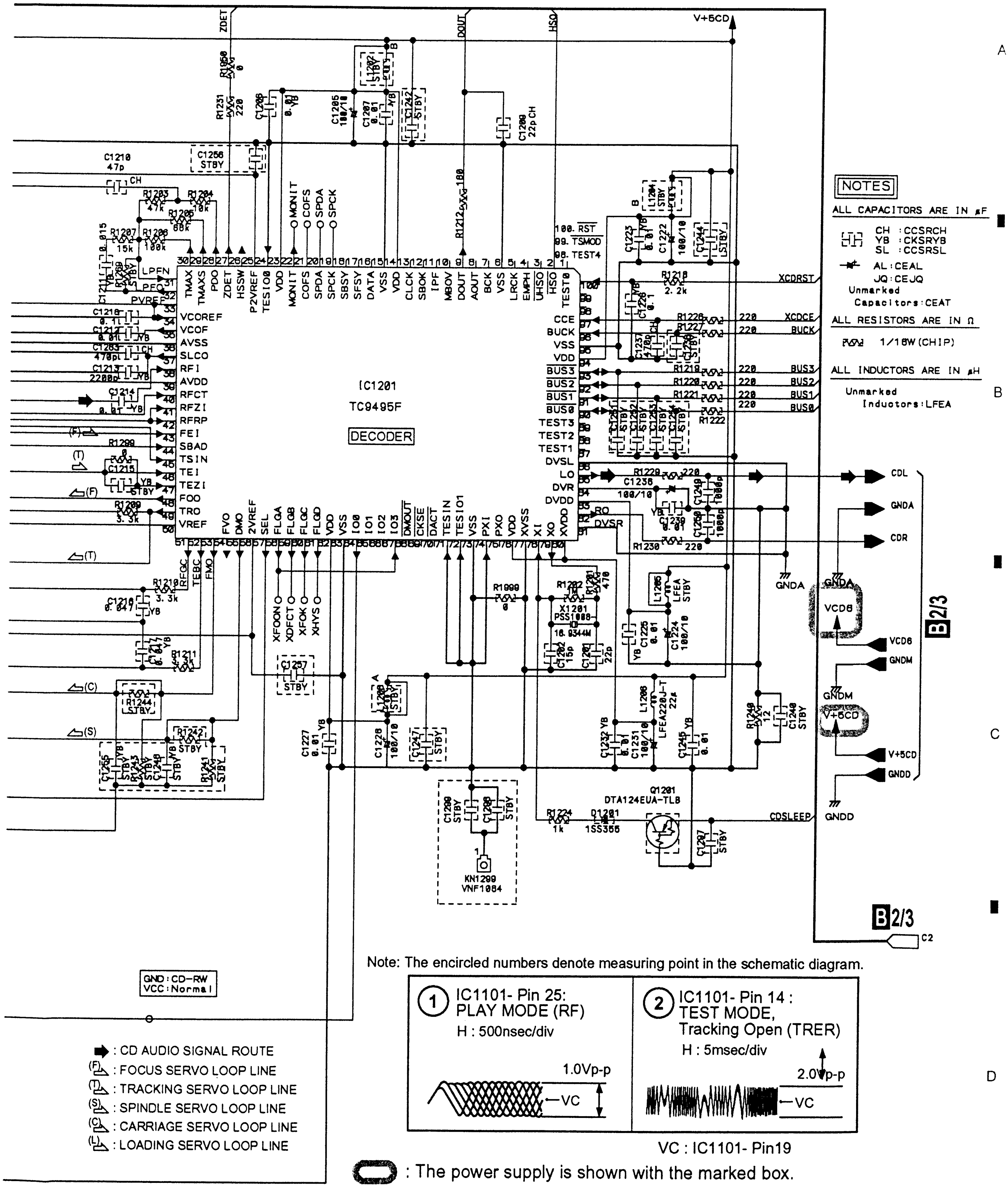
(FM) ⇨ : FM SIGNAL ROUTE


F203
ATF1155
F601
ATF7025
C606 680P
R602 220
Q601 2SC2412-TLB
R604 220 (RDScomp)
R603 4.7K
R601 680
V10
AA
A00 13 CE
A01 12 DI
A02 11 CLK
A03 10 DO
9 Roh
8 GND
7 Loh
6 MUTE/IF REQ.
5 STEREO
4 TUNE
3 +10V
2 RDS
1 NC
CN201
52044-1345
B 2/3 CN1
IC201 BA1451F-TB8
FM/IF IN
Vcc
FM TUNE ADJ
GND
FM DET
TUNE IND
ST IND
IF REQ/MUTE
IF OUT
R-ch
L-ch
AM/FM
MONO
MPX IN FM
MPX IN AM
AM/FM DETOUT
AM ADC
AM/IF IN
AM MIX OUT
AM RF IN
FM BW ADJ
AM OSC
VREG
AM OSC OUT
R222 10K
C215
C228 100P
C225 0.015
C227 22/25
C223 10/25
C221 2.2
C222 0.047
C220 0.01
R221 2.2K 1/4PU
Q205 2SC2412K
R219 680
C207 100P
R224 3.3K
D201 1SS133
C217
C216 0.01
Q204 2SC2412-TLB
R220 2.2K
R218 680
C208 1000P
C244 0.022
C219 47/16
R211 220 1/4PU
R212 5.1K
L201
ATE7003
ADJ
C211 1/50
R216 12K
R215 4.7K
R214 100
R213 100
C213 100P
C212 100P
R210 22K
R239 1K
(+10V)
C242 0.01
R240 6.8K
C243 33/16
C240
R238 2.2K
C239 0.01
C241 2.2/50
C238 1000P
R237 220
R235 1K
R234 2.2K
VD5
R233 390 1/4PU
C236 0.022
C237 47/16
D202 MTZJ5.1C
R217 0
IC202
LC72131MD-TFB
XOUT VSS AOUT AIN PD VDD FMIN AMIN FM/AM IFIN
XIN CE DI CL DO RFATT SW1 SW2 MONO SW
R232 10K
R228 1K
R229 1K
R230 1K
R231 1K
A00 A01 A02 A03
(AM)
(FM)
(TX)
GND

3.3 MOTHER(1/3) ASSY

B 1/3 MOTHER(1/3) ASSY (AWU7836)


1
2
3
4
A
B
C
D
DRIVER
IC1301 M56788AFP
REG+
REGB
IN1+
VBS1
Vm1
IN1-
OUT1
VM1-
VM1+
GND
VM2+
VM2-
OUT2
GND
IN2-
IN2+
MUTE1
MUTE2
SS. GND
VREF
VREFO
CH3IN
OUT3
IN3-
VBS2
Vm2
NC
GND
IN3+
VM3-
VM3+
GND
VM4+
VM4-
VM5+
VM5-
OUT5
IN5-
IN5+
IN4+
IN4-
OUT4
VCD6
C1323 STBY
L1301 STBY
C1321 100/10
C1320 100/10
C1322 0.1 YB
C1311 6800p YB
R1311 22k
R1309 27k
R1312 12k
C1315 0.01 YB
R1315 10k
R1313 10k
LOADIN
R1314 10k
LOADOUT
R1316 12k
R1317 27k F
R1319 22k F
C1319 6800p
R1318 10k
C1316 0.01 YB
CDDROFF
R1322 470
C1350 0.1 YB
GNDD
R1304 10k
FOO
R1301 33k
R1303 39k
C1303 47p CH
R1302 STBY
R1306 STBY
C1307 150p CH
R1305 39k
R1307 27k
TRO
R1308 10k
XCDRST
R1331 8.2k
C1327 0.1 YB
VC
C1324 STBY
C1325 0.1 YB
C1326 STBY
W174 STBY
C1330 0.1 YB
CDSLEEP
Q1301 UN5212-TLB
R1030 0
R1330 0
GNDM
GNDD
C2
C
HSO
V+5CD
DRIVER
CDINSIDE
CN1302 S6B-PH-K-S
CN601
C
LO-
LO+
GNDD
CD O/C
V+5CD
C1332 STBY
R1352 100k
C1352 STBY
R1351 100k
C1351 STBY
CDO/C
CN1301 S6B-PH-K-S
To CD MECHA
SL+
SL-
GNDD
CDINSIDE
SP+
SP-
C1333 STBY
C1331 STBY
Pick Up VAM2202/07
CN1101 SLW15S-1C7
To CD PICK UP
T-
F+
F-
T+
GND
A
E
C
MON
LD
VC
VCC
F
B
VR
V+5CD
C1109 STBY
L1102 STBY
H : 1倍
L : 2/4倍
R1102 68
C1108 100/10 AL-TS
R1103 82
C1107 0.01 YB
2SA1577(PQR) Q1101
R1101 68
D1101 STBY
L1101 STBY
C1101 100/10
C1104 0.1 YB
C1130 0.01 YB
C1131 0.1 YB
R1105 82k
R1106 82k
R1107 82k
R1108 82k
R1110 0
R1111 0
C1102 100/10
C1103 0.01 YB
R1126 47k
C1127 STBY
R1146 STBY
R1130 100
R1131 1k
R1141 27k
R1144 27k
R1148 STBY
R1145 STBY
IC1101 TA2150FN
VCC
RFGC
GMAD
FNI
FPI
TPI
TNI
MOI
LDO
SEL
TEB
2VRO
TEN
TEO
SBAD
RFN
GND
RFO
AGCI
GVSW
RFGO
RFRPIN
PKC
RFCT
BTC
RFRP
VRO
SEB
FEN
FEO
①
②
VC
R1129 STBY
Q1102 STBY
R1112 10k
R1113 4.7k
R1114 10k
C1116 2p CK
R1121 2.2k
C1118 STBY CH
R1123 1k
C1117 39p CH
R1127 68k
R1122 10k
C1110 0.1 YB
R1124 220
C1111 0.1 YB
C1112 0.22 YB
C1119 100p CH
C1113 0.22 YB
R1120 0
R1125 100k
C1126 STBY
C1114 0.01 YB
C1115 100/10
GNDD
RF AMP
C1241 1000p
L1201 2.2 LFEA2R2J-T
C1203 100/10 AL-TS
C1204 0.01 YB
R1214 STBY
R1147 1k
C1141 6800p
FMO
FOO
TRO
FMO


IC1201
TC9495F
DECODER
ZDET
DOUT
HSO
V+5CD
TMAX
TMAXS
PDO
ZDET
HSSW
P2VREF
TES100
VDD
MONIT
COFS
SPDA
SPCK
SBSY
SFSY
DATA
VSS
VDD
CLCK
SBOK
IPF
MBOV
DOUT
AOUT
BCK
VSS
LRCK
EMPH
UHSO
HSO
TEST0
LPFN
PFO
PVREF
VCOREF
VCOF
AVSS
SLCO
RFI
AVDD
RFCT
RFZI
RFRP
FEI
SBAD
TSIN
TEI
TEZI
FOO
TRO
VREF
FVO
DMO
2VREF
SEL
FLGA
FLGB
FLGC
FLGD
VDD
VSS
IO0
IO1
IO2
IO3
DMOUT
CKSE
DACT
TESIN
TESIO1
VSS
PXI
PXO
VDD
XVSS
XI
XO
XVDD
RO
DVSR
DVDD
DVR
LO
DVSL
TEST1
TEST2
TEST3
BUS0
BUS1
BUS2
BUS3
VDD
VSS
BUCK
CCE
100. RST
99. TSMOD
98. TEST4
XCDRST
XCDCE
BUCK
BUS3
BUS2
BUS1
BUS0
CDL
GNDA
CDR
VCD6
GNDM
V+5CD
GNDD
CDSLEEP
B2/3
C2
XFOON
XDFCT
XFOK
XHYS
X1201
PSS1008-
16.9344M
Q1201
DTA124EUA-TLB
R1224
1k
D1201
1SS355
KN1299
VNF1084
L1206
LFEA220J-T
22µ
L1205
LFEA
STBY
C1210
47p
R1203
47k
R1204
10k
R1205
68k
R1207
15k
R1206
100k
C1209
22p CH
R1212
100
R1218
2.2k
R1226
R1227
R1219
R1220
R1221
R1222
220
R1229
220
R1230
220
C1236
100/10
R1999
0
R1202
1M
R1201
470
C1202
15p
C1201
22p
C1224
100/10
C1225
0.01
C1227
0.01
C1228
100/10
C1231
100/10
C1232
0.01
C1245
0.01
R1240
12
C1240
STBY
R1209
3.3k
R1210
3.3k
C1216
0.047
R1211
R1244
STBY
R1242
STBY
R1241
STBY
C1255
STBY
C1256
STBY
C1257
STBY
C1299
STBY
C1298
STBY
C1297
STBY
R1250
0
R1251
220
C1205
100/10
C1207
0.01
(F)
(T)
(C)
(S)
GNDA
GNDM
GNDD
GND:CD-RW
VCC:Normal

NOTES

ALL CAPACITORS ARE IN µF

CH :CCSRCH
YB :CKSRYB
SL :CCSRSL
AL:CEAL
JQ:CEJQ
Unmarked Capacitors:CEAT

ALL RESISTORS ARE IN Ω

1/16W(CHIP)

ALL INDUCTORS ARE IN µH

Unmarked Inductors:LFEA

GND:CD-RW
VCC:Normal

➡ : CD AUDIO SIGNAL ROUTE
(F) : FOCUS SERVO LOOP LINE
(T) : TRACKING SERVO LOOP LINE
(S) : SPINDLE SERVO LOOP LINE
(C) : CARRIAGE SERVO LOOP LINE
(L) : LOADING SERVO LOOP LINE

Note: The encircled numbers denote measuring point in the schematic diagram.

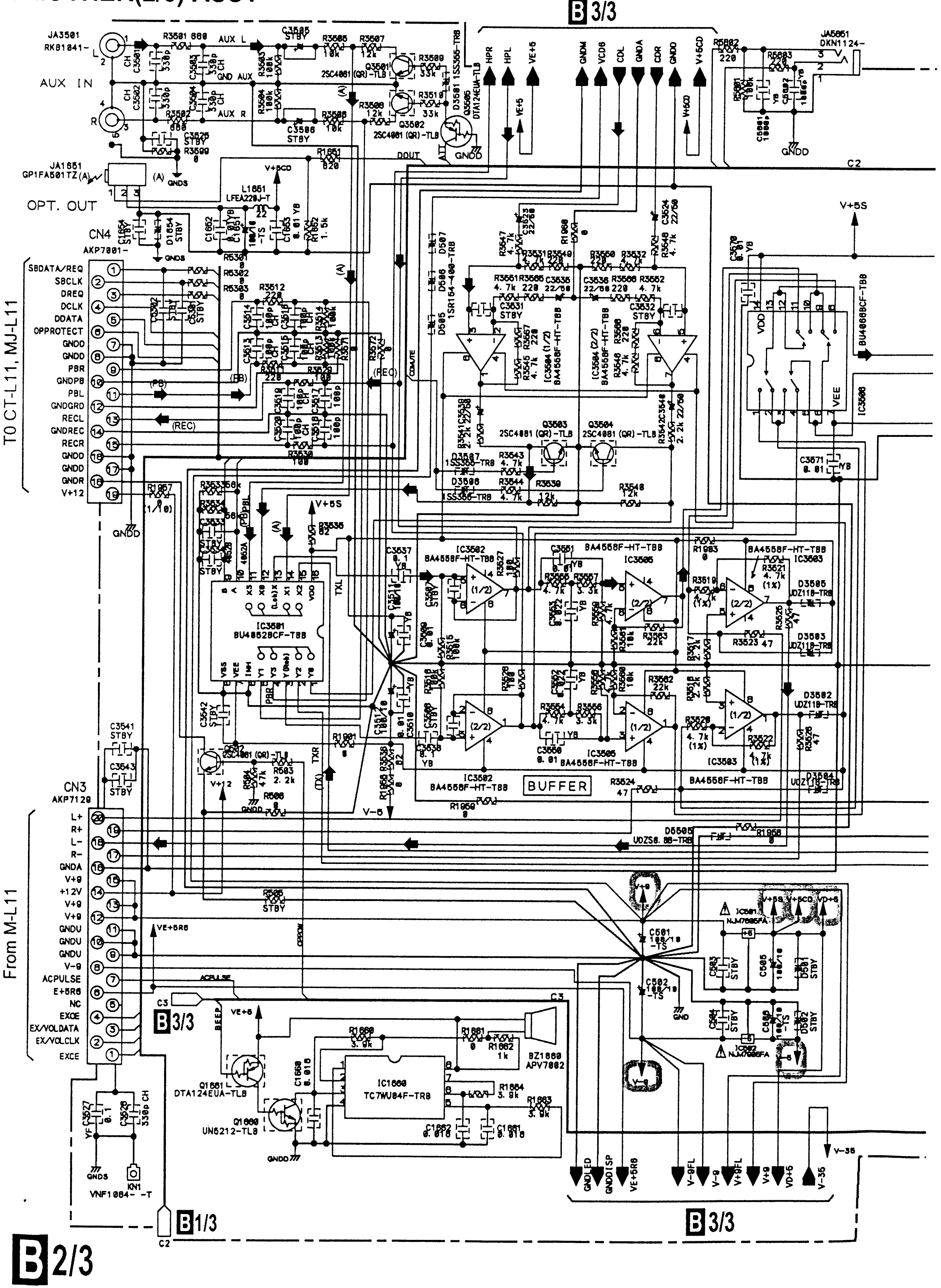
① IC1101- Pin 25:
PLAY MODE (RF)
H : 500nsec/div
1.0Vp-p
—VC

② IC1101- Pin 14 :
TEST MODE,
Tracking Open (TRER)
H : 5msec/div
2.0Vp-p
—VC

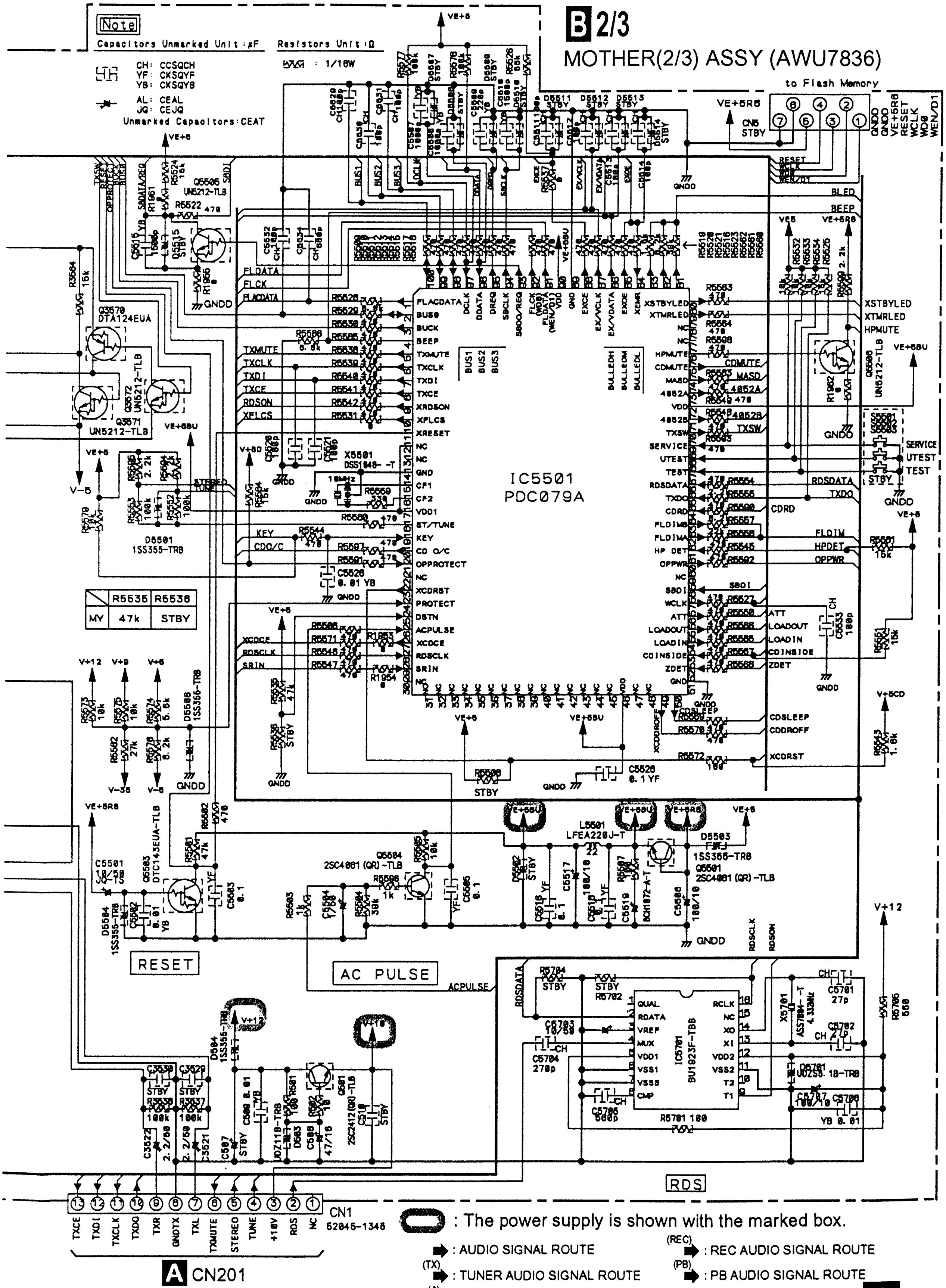
VC : IC1101- Pin19

⬭ : The power supply is shown with the marked box.

3.4 MOTHER(2/3) ASSY


B 3/3
JA3501
RKB1841-
AUX IN
L
R
R3501 680
R3502 680
AUX L
AUX R
GND AUX
C3505 STBY
C3506 STBY
R3505 10k
R3506 10k
R3507 12k
R3508 12k
R3509 33k
R3510 33k
Q3501 2SC4081 (QR)-TLB
Q3502 2SC4081 (QR)-TLB
Q3505 DTA124EUA-TLB
D3501 1SS355-TRB
R3599 0
JA1651
GP1FA501TZ(A)
OPT. OUT
L1651
LFEA220J-T
R1651 820
R1652 1.5k
DOUT
V+5CD
CN4
AKP7001-
SBDATA/REQ
SBCLK
DREQ
DCLK
DDATA
OPPROTECT
GNDD
PBR
GNDPB
PBL
GNDGRD
RECL
GNDREC
RECR
GNDR
V+12
TO CT-L11, MJ-L11
(PB)
(REC)
R1657 0 (1/10)
GNDD
HPR
HPL
VE+5
GNDM
VCD6
CDL
GNDA
CDR
GNDD
V+6CD
R5802 220
R5803 220
JA5851
DKN1124-
C2
V+5S
BU4066BCF-TBB
IC3506
IC3504 (1/2) BA4558F-HT-TBB
IC3504 (2/2) BA4558F-HT-TBB
Q3503 2SC4081 (QR)-TLB
Q3504 2SC4081 (QR)-TLB
D505 D506 D507 1SR154-400-TRB
IC3501
BU4052BCF-TBB
V+5S
IC3502
BA4558F-HT-TBB
IC3505
BA4558F-HT-TBB
IC3503
BA4558F-HT-TBB
BUFFER
D3505 UDZ11B-TRB
D3503 UDZ11B-TRB
D3502 UDZ11B-TRB
D3504 UDZ11B-TRB
D5505 UDZS6.8B-TRB
Q3502 2SC4081 (QR)-TLB
V+12
V-8
CN3
AKP7129
L+
R+
L-
R-
GNDA
V+9
+12V
GNDU
V-9
ACPULSE
E+5R6
NC
EXCE
EX/VOLDATA
EX/VOLCLK
From M-L11
VE+5R6
C3
IC501 NJM7805FA
IC502 NJM7905FA
C501 100/10 -TS
C502 100/10 -TS
BEEP
VE+5
Q1661 DTA124EUA-TLB
Q1660 UN5212-TLB
IC1660
TC7WU04F-TRB
BZ1660
APV7002
R1660 3.9k
R1661 0
R1662 1k
R1664 3.9k
R1663 3.9k
GNDD
KN1
VNF1004- -T
GNDS
B 1/3
GNDLED
GNDDISP
VE+5R6
V-9FL
V-9
V+9FL
V+9
VD+6
V-35
B 3/3

B 2/3
MOTHER(2/3) ASSY (AWU7836)


Note
Capacitors Unmarked Unit : µF
Resistors Unit : Ω
1/16W
CH : CCSQCH
YF : CKSQYF
YB : CKSQYB
AL : CEAL
JQ : CEJQ
Unmarked Capacitors : CEAT
to Flash Memory
CN5
STBY
VE+5R8
GNDD
VE+5R8
RESET
WCLK
WDG
WEN/D1
IC5501
PDC079A
X5501
DSS1048-T
10MHz
Q5505
UN5212-TLB
Q3570
DTA124EUA
Q3572
UN5212-TLB
Q3571
UN5212-TLB
Q5506
UN5212-TLB
D5501
1SS355-TRB
D5506
1SS355-TRB
R5535 R5536
MY 47k STBY
RESET
AC PULSE
ACPULSE
Q5503
DTC143EUA-TLB
Q5504
2SC4081 (QR) -TLB
Q5501
2SC4081 (QR) -TLB
L5501
LFEA220J-T
D5503
1SS355-TRB
D5504
1SS355-TRB
C5501
10/50
JQ-TS
IC5701
BU1923F-TBB
X5701
ASS7004-T
4.332MHz
D5701
UDZS6.1B-TRB
RDS
QUAL
RDATA
VREF
MUX
VDD1
VSS1
VSS3
CMP
RCLK
NC
XO
XI
VDD2
VSS2
T2
T1
D504
1SS355-TRB
Q501
2SC2412 (QR)-TLB
D503
UDZ11B-TRB
VE+5
VE+5BU
VE+5R8
VE+5CD
V+12
V+9
V+5
V-5
V-35
V+10
GNDD
STBY
XSTBYLED
XTMRLED
HPMUTE
SERVICE
UTEST
TEST
BLED
BEEP
FLDIM
HPDET
OPPWR
CDRD
TXSW
RDSDATA
TXDO
ATT
LOADOUT
LOADIN
CDINSIDE
ZDET
CDSLEEP
CDDROFF
XCDRST
MASD
4052A
4052B
CDMUTE
FLDATA
FLCK
FLACDATA
TXMUTE
TXCLK
TXDI
TXCE
RDSON
XFLCS
KEY
CDO/C
XCDCE
RDSCLK
SRIN
BUS1
BUS2
BUS3
BULLEDH
BULLEDL
BULLEDL
CN1
52045-1345
TXCE
TXDI
TXCLK
TXDO
TXR
GNDTX
TXL
TXMUTE
STEREO
TUNE
+10V
RDS
NC
A CN201

: The power supply is shown with the marked box.

➡ : AUDIO SIGNAL ROUTE

(TX) ➡ : TUNER AUDIO SIGNAL ROUTE

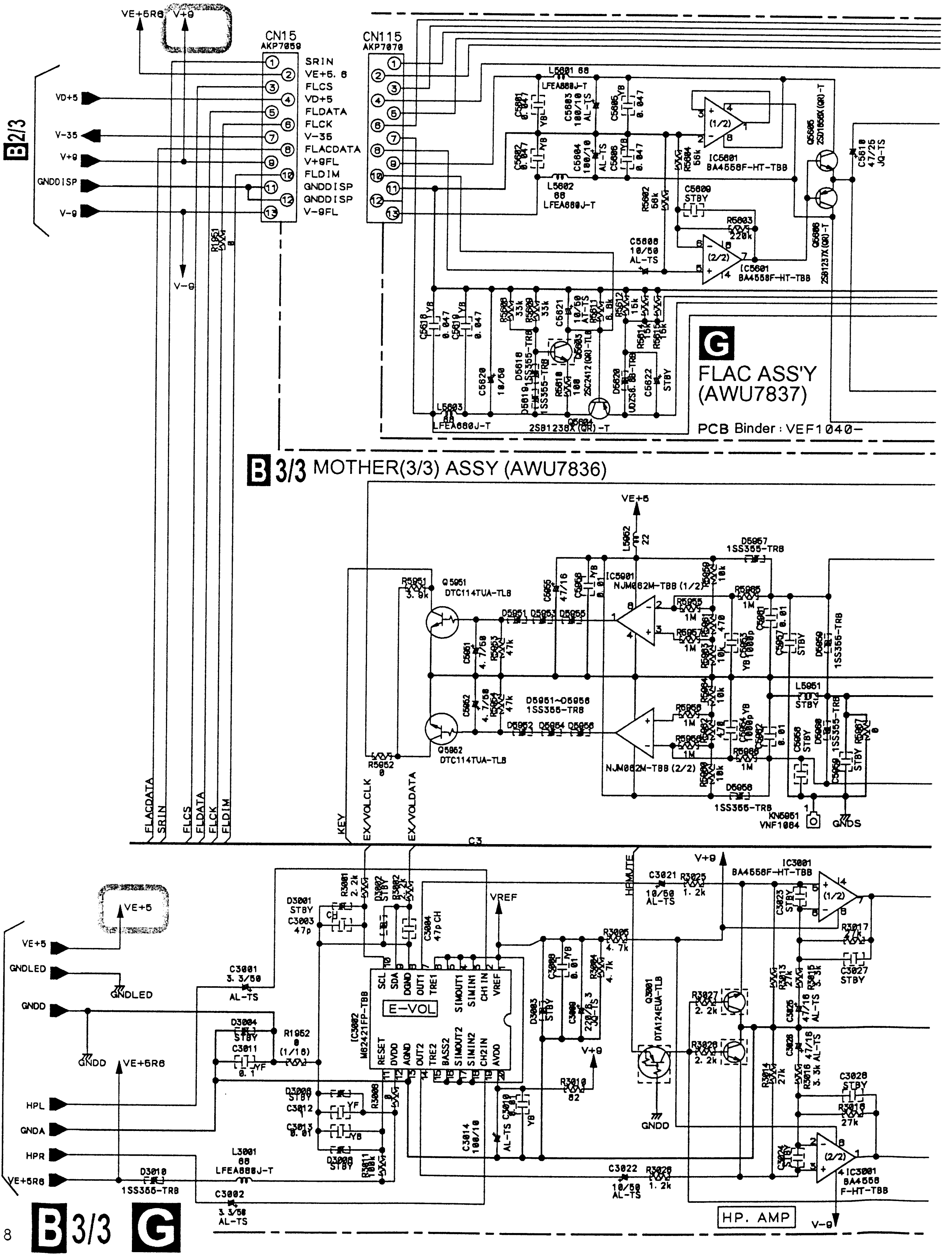
(A) ➡ : AUX AUDIO SIGNAL ROUTE

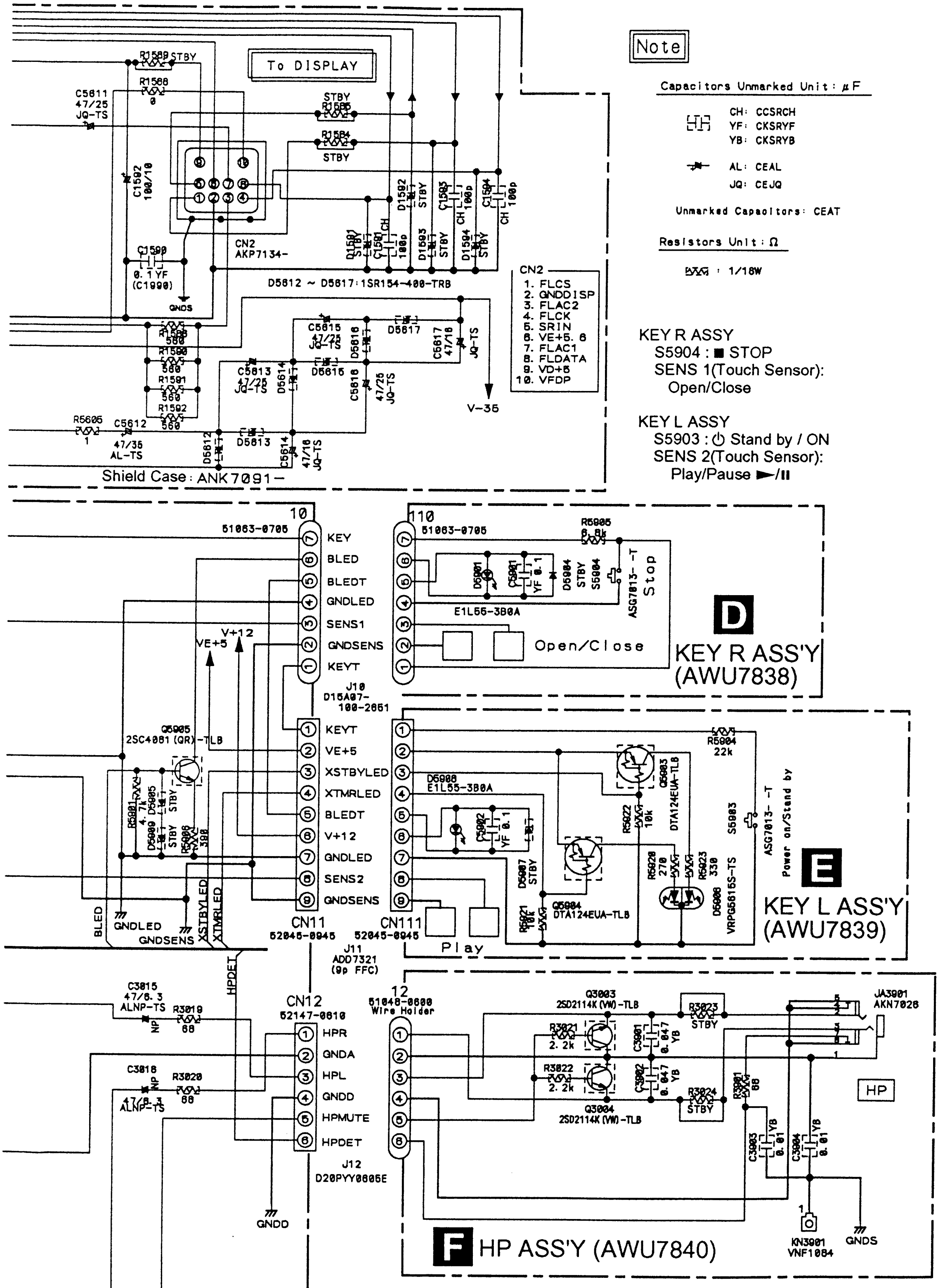
(REC) ➡ : REC AUDIO SIGNAL ROUTE

(PB) ➡ : PB AUDIO SIGNAL ROUTE

B 2/3

3.5 MOTHER(3/3), FLAC, KEY R, KEY L and HP ASSYS


CN15
AKP7059
SRIN
VE+5.6
FLCS
VD+5
FLDATA
FLCK
V-35
FLACDATA
V+9FL
FLDIM
GNDDISP
GNDDISP
V-9FL
VE+5R6
V+9
VD+5
V-35
V+9
GNDDISP
V-9
V-9
R1951
B 2/3
CN115
AKP7070
L5601 68
LFEA680J-T
L5602 68
LFEA680J-T
L5603 68
LFEA680J-T
IC5601
BA4558F-HT-TBB
Q5605
2SD1858X(QR)-T
Q5606
2SB1237X(QR)-T
C5610 47/25 JQ-TS
C5609 STBY
R5603 220k
C5608 10/50 AL-TS
Q5603
2SC2412(QR)-TLB
Q5604
2SB1238X(QR)-T
D5619, D5618
1SS355-TRB
D5620
UDZS6.8B-TRB
G
FLAC ASS'Y
(AWU7837)
PCB Binder : VEF1040-
B 3/3 MOTHER(3/3) ASSY (AWU7836)
VE+5
L5962 22
D5957
1SS355-TRB
IC5901
NJM062M-TBB (1/2)
NJM062M-TBB (2/2)
Q5951
DTC114TUA-TLB
Q5952
DTC114TUA-TLB
R5951 3.9k
R5952 0
D5951~D5956
1SS355-TRB
L5951 STBY
D5958
1SS355-TRB
KN5951
VNF1084
GNDS
FLACDATA
SRIN
FLCS
FLDATA
FLCK
FLDIM
KEY
EX/VOLCLK
EX/VOLDATA
C3
VE+5
VE+5
GNDLED
GNDLED
GNDD
GNDD
VE+5R6
HPL
GNDA
HPR
VE+5R6
B 2/3
C3001 3.3/50 AL-TS
D3001 STBY
C3003 47p
C3004 47p CH
R3001 2.2k
R3002
D3004 STBY
C3011 0.1 YF
R1952 0 (1/16)
D3010
1SS355-TRB
L3001 68
LFEA680J-T
C3002 3.3/50 AL-TS
IC3002
M62421FP-TBB
E-VOL
SCL SDA DGND OUT1 TRE1 SIMOUT1 SIMIN1 CH1IN VREF
RESET DVDD AGND OUT2 TRE2 BASS2 SIMOUT2 SIMIN2 CH2IN AVDD
VREF
C3014 100/10
D3003 STBY
HPMUTE
V+9
C3021 10/50 AL-TS
R3025 1.2k
IC3001
BA4558F-HT-TBB
R3017
C3027 STBY
R3005 4.7k
R3004 4.7k
R3010 82
Q3001
DTA124EUA-TLB
R3027 2.2k
R3028 2.2k
GNDD
C3028 STBY
R3018 27k
C3022 10/50 AL-TS
R3026 1.2k
IC3001
BA4558
F-HT-TBB
HP. AMP
V-9
1 2 3 4
A B C D


To DISPLAY
R1589 STBY
R1588 0
C5611 47/25 JQ-TS
STBY R1585
R1584 STBY
C1592 100/10
CN2 AKP7134-
C1590 0.1 YF (C1990)
GNDS
D1591 STBY
C1591 CH 100p
D1592 STBY
D1593 STBY
C1593 CH 100p
D1594 STBY
C1594 CH 100p
D5612 ~ D5617 : 1SR154-400-TRB
CN2
1. FLCS
2. GNDDISP
3. FLAC2
4. FLCK
5. SRIN
6. VE+5. 6
7. FLAC1
8. FLDATA
9. VD+5
10. VFDP
R1589 560
R1590 560
R1591 560
R1592 560
C5615 47/25 JQ-TS
D5617
C5617 47/16 JQ-TS
C5613 47/25 JQ-TS
D5614
D5616
D5615
C5616 47/25 JQ-TS
V-35
R5605 1
C5612 47/35 AL-TS
D5612
D5613
C5614 47/16 JQ-TS
Shield Case : ANK7091-
10
51063-0705
KEY
BLED
BLEDT
GNDLED
SENS1
GNDSENS
KEYT
VE+5
V+12
J10 D15A07-100-2651
110
51063-0705
R5905 6.8k
D5901
C5901 YF 0.1
D5904 STBY
S5904
ASG7013- -T Stop
E1L55-3B0A
Open/Close
D
KEY R ASS'Y (AWU7838)
Q5905 2SC4081 (QR)-TLB
R5901 4.7k
D5905 STBY
D5909 STBY
R5906 390
KEYT
VE+5
XSTBYLED
XTMRLED
BLEDT
V+12
GNDLED
SENS2
GNDSENS
R5904 22k
Q5903 DTA124EUA-TLB
D5908 E1L55-3B0A
C5902 YF 0.1
R5922 10k
S5903
ASG7013- -T
Power on/Stand by
D5907 STBY
R5920 270
R5923 330
D5906 VRPG5615S-TS
R5921 10k
Q5904 DTA124EUA-TLB
E
KEY L ASS'Y (AWU7839)
BLED
GNDLED
GNDSENS
XSTBYLED
XTMRLED
CN11 52045-0945
CN111 52045-0945
J11 ADD7321 (9p FFC)
Play
HPDET
C3015 47/6.3 ALNP-TS
R3019 68
NP
C3016 47/6.3 ALNP-TS
R3020 68
CN12 52147-0610
HPR
GNDA
HPL
GNDD
HPMUTE
HPDET
J12 D20PYY0605E
GNDD
12 51048-0600 Wire Holder
Q3003 2SD2114K (VW)-TLB
R3021 2.2k
C3001 0.047 YB
R3023 STBY
JA3901 AKN7026
R3022 2.2k
C3002 0.047 YB
R3024 STBY
Q3004 2SD2114K (VW)-TLB
R3901 68
HP
C3903 0.01 YB
C3904 0.01 YB
KN3901 VNF1084
GNDS
F
HP ASS'Y (AWU7840)

Note

Capacitors Unmarked Unit : µF

CH : CCSRCH
YF : CKSRYF
YB : CKSRYB

AL : CEAL
JQ : CEJQ

Unmarked Capacitors : CEAT

Resistors Unit : Ω

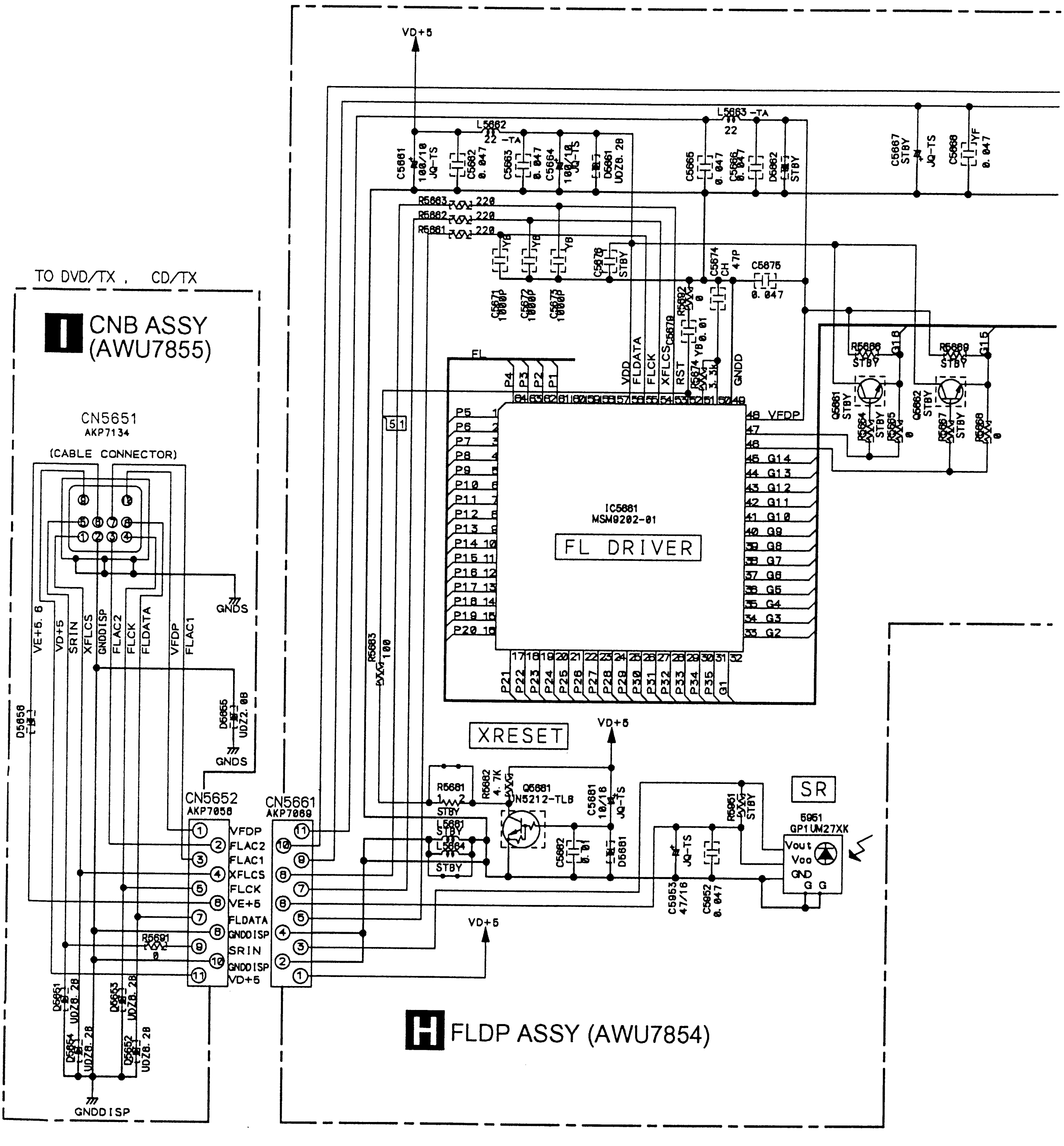
: 1/16W

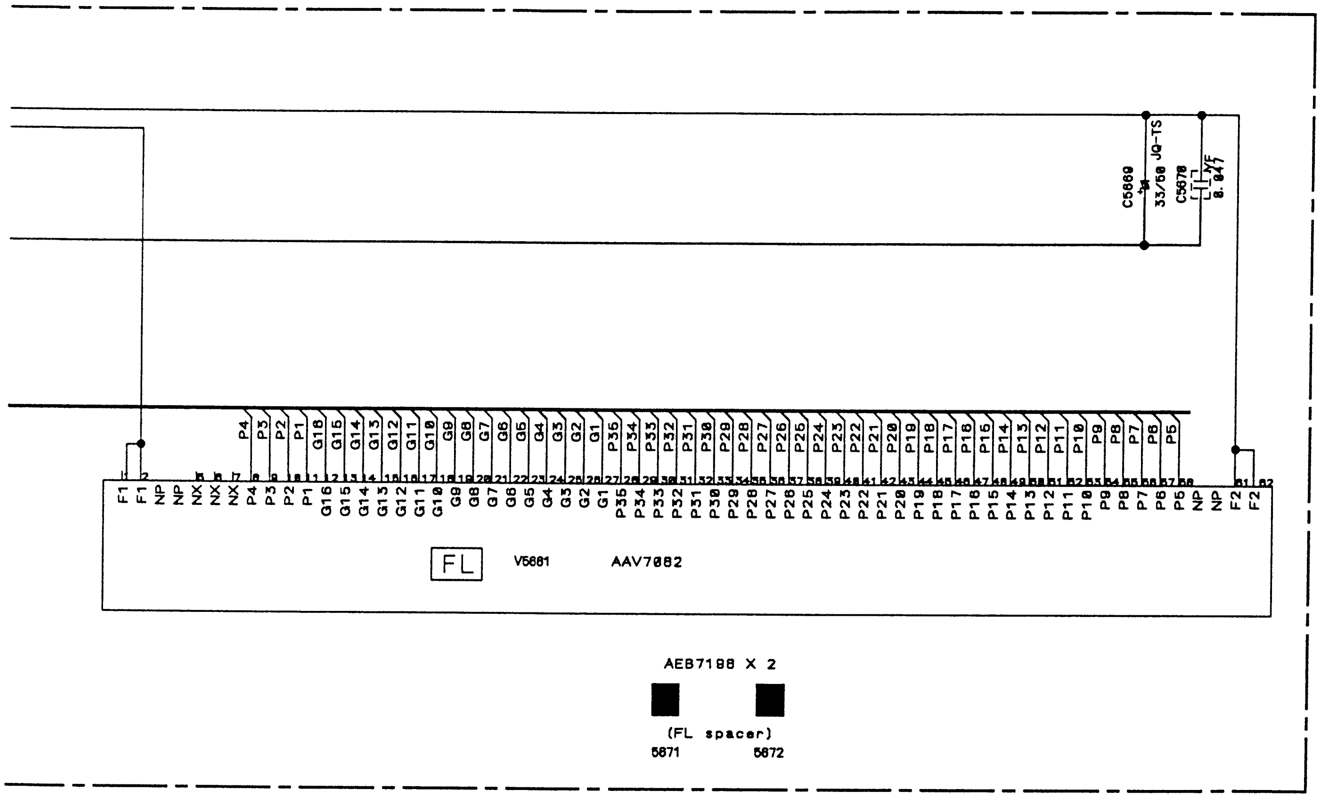
KEY R ASSY
S5904 : ■ STOP
SENS 1(Touch Sensor): Open/Close

KEY L ASSY
S5903 : ⏻ Stand by / ON
SENS 2(Touch Sensor): Play/Pause ►/II

: The power supply is shown with the marked box.

3.6 FLDP and CNB ASSYS


TO DVD/TX , CD/TX
I CNB ASSY (AWU7855)
CN5651
AKP7134
(CABLE CONNECTOR)
GNDS
VE+5.6
VD+5
SRIN
XFLCS
GNDDISP
FLAC2
FLCK
FLDATA
VFDP
FLAC1
D5656
D5655
UDZ2.0B
CN5652
AKP7058
VFDP
FLAC2
FLAC1
XFLCS
FLCK
VE+5
FLDATA
GNDDISP
SRIN
GNDDISP
VD+5
R5691
0
D5651 UDZ8.2B
D5653 UDZ8.2B
D5654 UDZ8.2B
D5652 UDZ8.2B
GNDDISP
CN5661
AKP7069
VD+5
L5662 22 -TA
C5661 100/10 JQ-TS
C5662 0.047
C5663 0.047
C5664 100/10 JQ-TS
D5661 UDZ8.2B
C5665 0.047
L5663 -TA 22
C5666 0.047
D5662 STBY
C5667 STBY
JQ-TS
C5668 JYF 0.047
R5663 220
R5662 220
R5661 220
JYB
JYB
YB
C5676 STBY
C5671 1000P
C5672 1000P
C5673 1000P
C5674 CH 47P
C5675 0.047
R5692 0
C5679 0.01
R5674 YB 0
3.3K
VDD
FLDATA
FLCK
XFLCS
RST
GNDD
FL
P4 P3 P2 P1
P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20
51
IC5661
MSM9202-01
FL DRIVER
VFDP
G14 G13 G12 G11 G10 G9 G8 G7 G6 G5 G4 G3 G2
P21 P22 P23 P24 P25 P26 P27 P28 P29 P30 P31 P32 P33 P34 P35 G1
R5686 STBY
G16
R5689 STBY
G15
Q5661 STBY
R5664 STBY
R5665 0
Q5662 STBY
R5667 STBY
R5668 0
R5683 100
XRESET
VD+5
R5681 STBY
R5682 4.7K
Q5681 UN5212-TLB
C5681 10/16 JQ-TS
L5681 STBY
L5684 STBY
C5682 0.01
D5681
R5951 STBY
SR
5951 GP1UM27XK
Vout
Vcc
GND
G G
C5953 47/16 JQ-TS
C5952 0.047
VD+5
H FLDP ASSY (AWU7854)


C5869
JQ-TS
33/50
C5870
YF
0.047
FL
V5681
AAV7082
AEB7198 X 2
(FL spacer)
5871
5872
F1
F2
NP
NX

NOTES

ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED

CH : CCSRCH
YF : CKSRYF
(OTHER : CKSRYB)

: CEJQ -TS
JQ-TS

ALL RESISTORS ARE IN Ω

1/16W
1/4WPU

ALL INDUCTORS ARE IN μH

LAU -TA
-TA

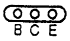
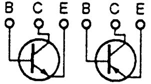
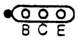
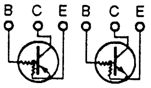
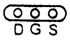
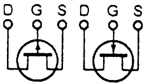
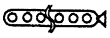
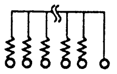
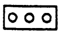
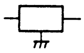
NO MARK DIODE

1SS355

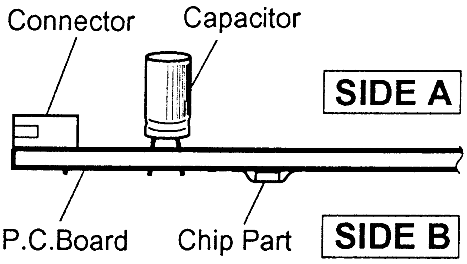
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

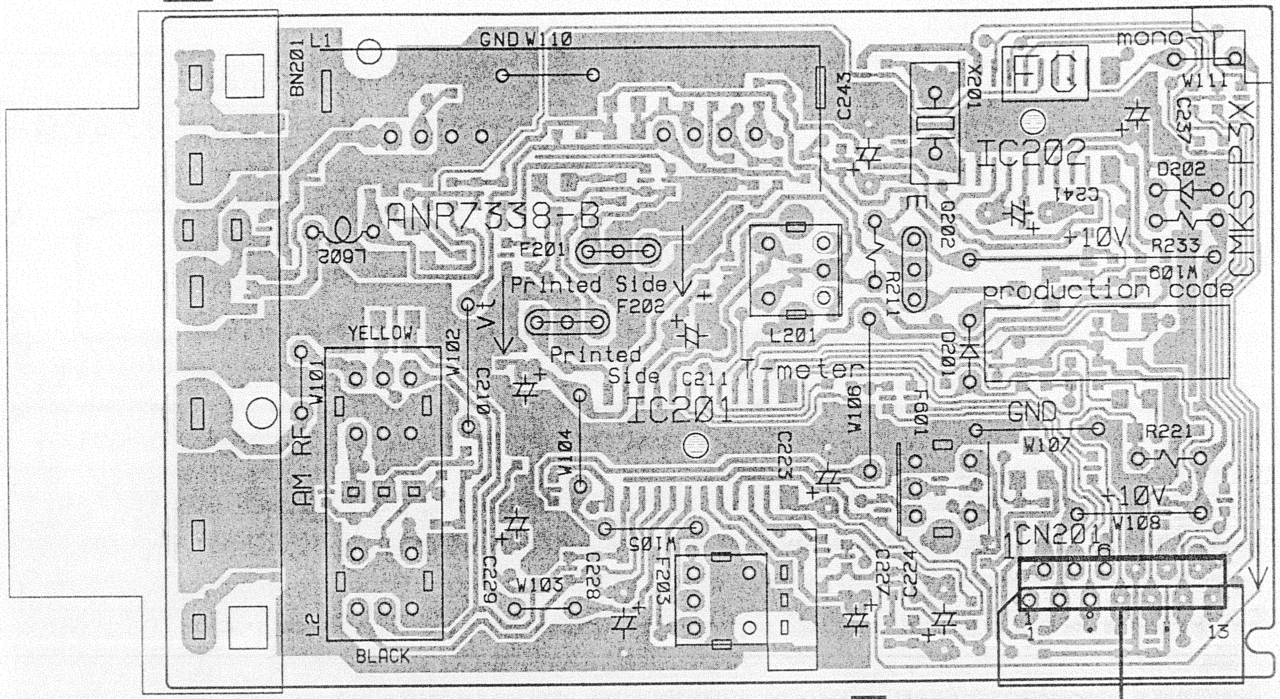
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.


Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

4.1 FM/AM TUNER MODULE

A FM/AM TUNER MODULE

SIDE A


BN201
L1
GND W110
C243
X201
IC202
mono
W111
C237
D202
C241
Q202
+10V
R233
W109
CMKS-P3X
production code
ANP7338-B
L602
F201
Printed Side
F202
Vt
YELLOW
W101
W102
Q103
AM RF
L201
R211
D201
Printed Side
C211
T-meter
IC201
W106
L601
GND
W107
R221
+10V
W108
CN201
W104
C223
C224
C227
W105
F203
C229
W103
C228
L2
BLACK
1
13

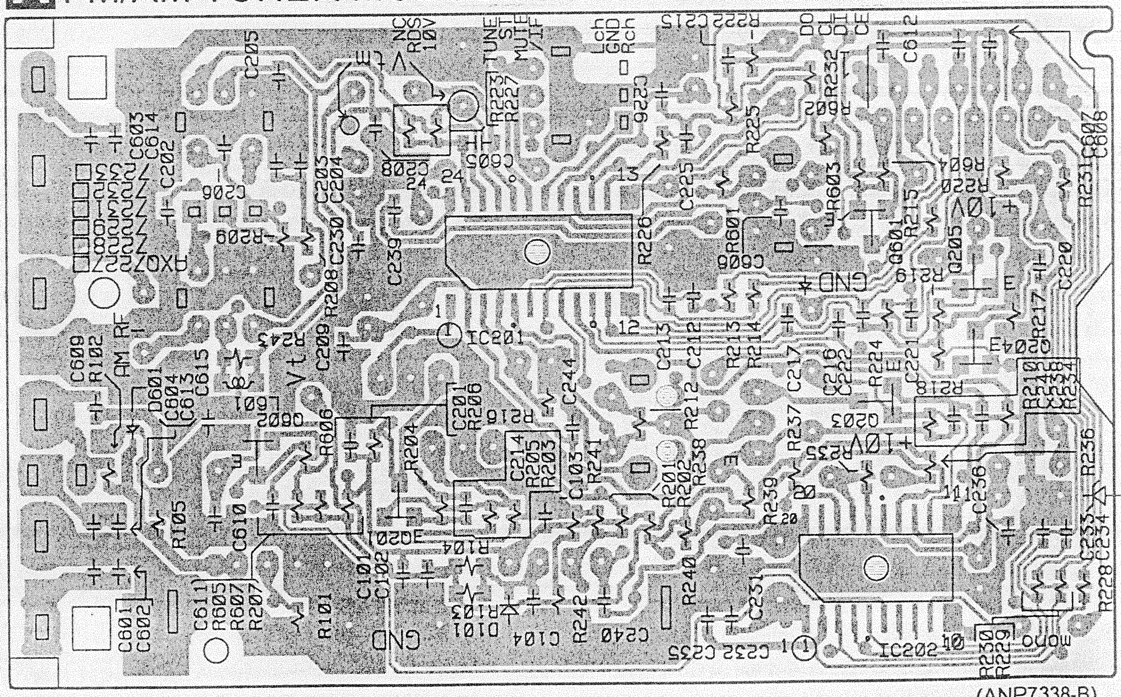
B CN1

(ANP7338-B)

Q202

A FM/AM TUNER MODULE

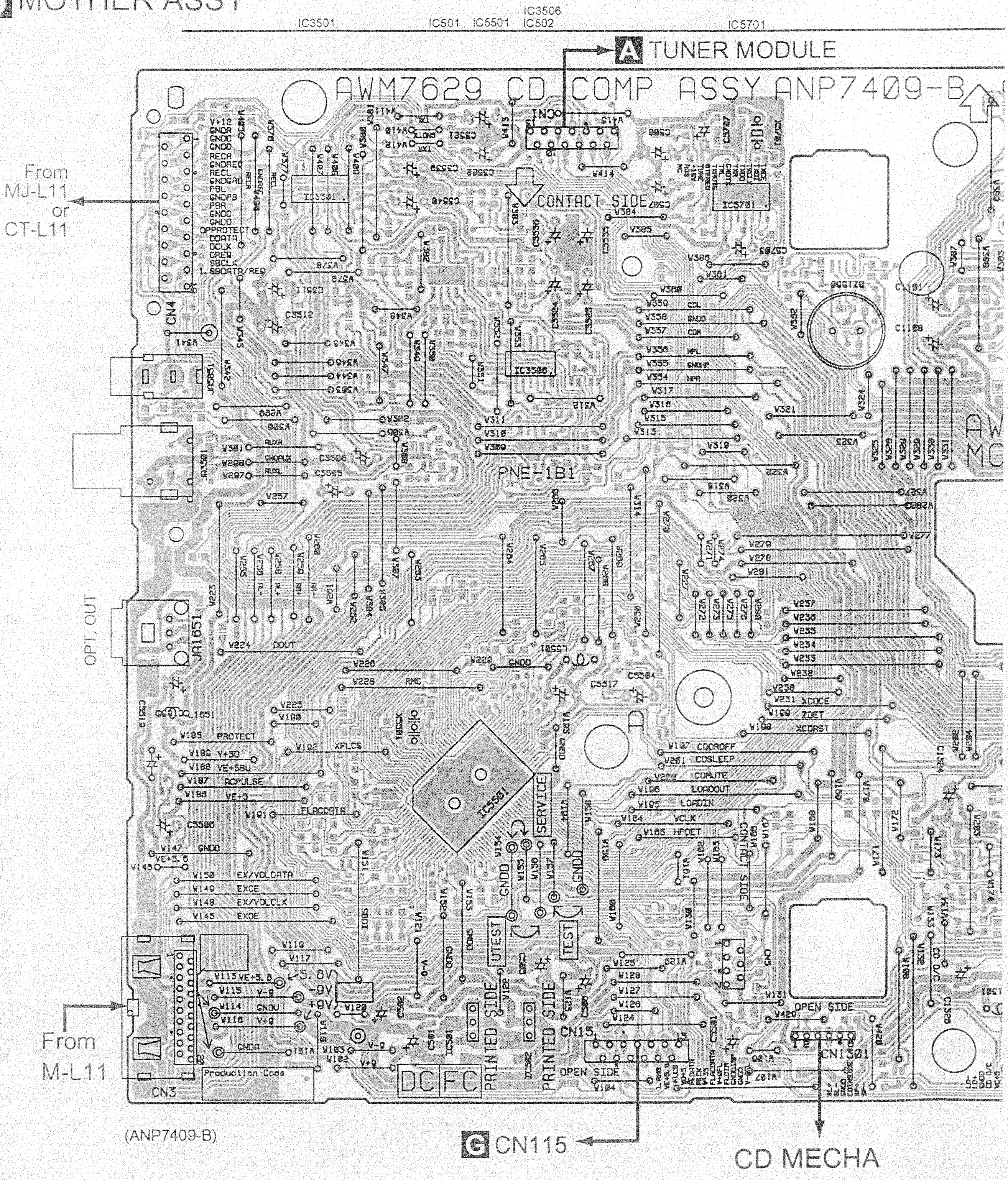
SIDE B


C205
NC
RDS
10V
TUNE
ST
MUTE
/IF
Lch
GND
Rch
C215
R222
DO
CL
DI
CE
C612
C603
C614
C202
C206
C203
C204
R223
R227
C605
C226
R225
R232
R608
R231
C607
C608
C208
24
13
C225
WR603
R604
R220
10V
AXO2
R209
C230
C239
R226
C601
R215
Q205
C220
R608
R216
GND
Q601
E
AM RF
C609
R102
R243
Vt
C209
1
IC201
12
C213
C212
R213
R214
C217
C216
C222
R224
C221
R218
R217
E
Q204
R219
C538
R234
D601
C604
C613
C615
L601
Q602
R606
C201
R206
R210
C244
R212
R237
Q203
R235
10V
R236
R105
C610
Q201
R204
C214
R205
R203
C103
R241
R201
R202
R238
R239
C236
C233
C234
R228
C601
C602
C611
R605
R607
R207
R101
C101
C102
R104
R103
D101
C104
R242
C240
R240
C231
C235
C232
1
IC202
10
R230
R229
mono
GND

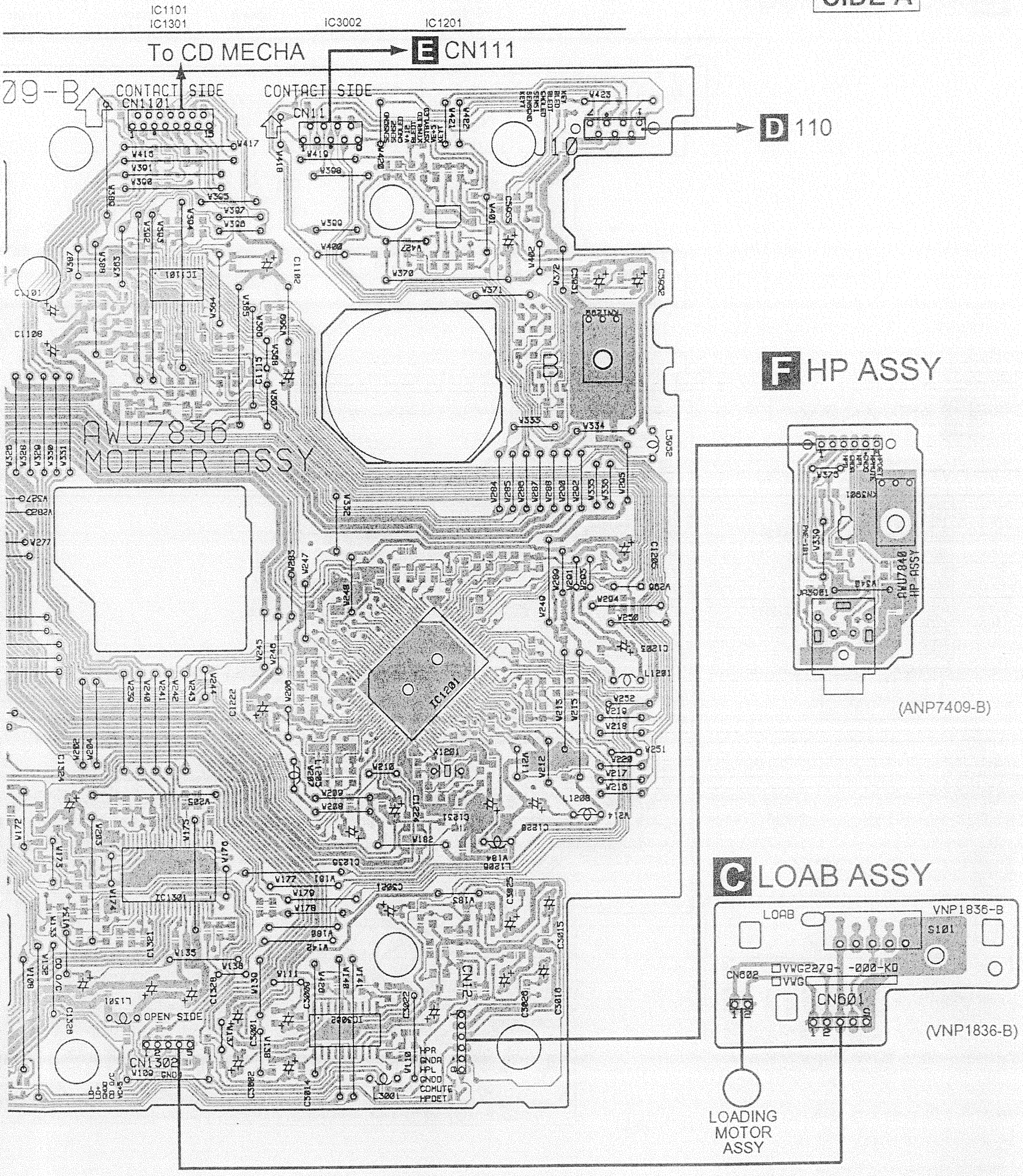
(ANP7338-B)

4.2 MOTHER, LOAB and HP ASSYS

B MOTHER ASSY

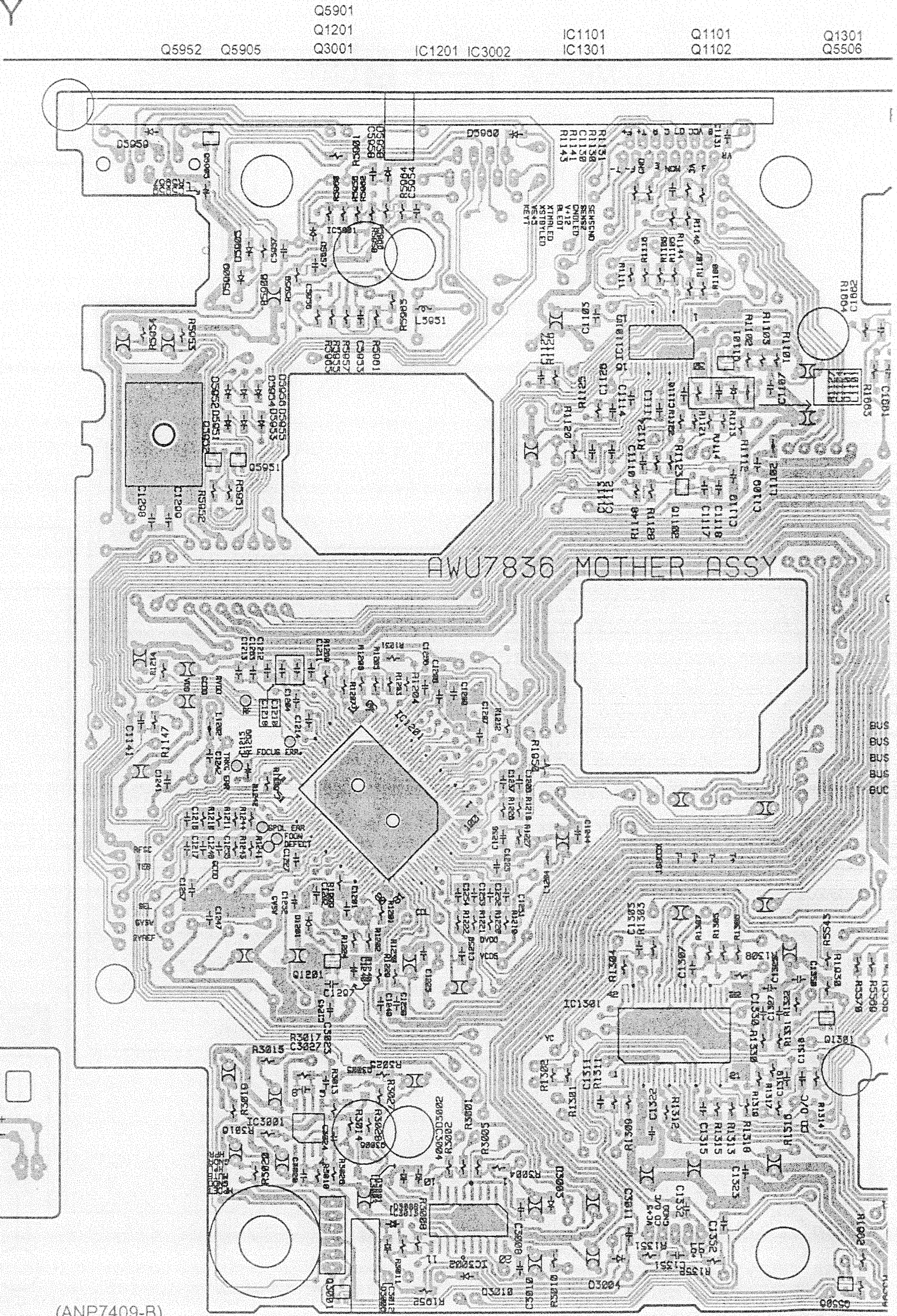

IC3501
IC501
IC5501
IC3506
IC502
IC5701
A TUNER MODULE
AWM7629 CD COMP ASSY ANP7409-B
CONTACT SIDE
From MJ-L11 or CT-L11
CN4
JA3501
OPT. OUT
JA1651
PNE-1B1
IC5501
SERVICE
UTEST
TEST
PRINTED SIDE
DC FC
From M-L11
CN3
Production Code
CN15
OPEN SIDE
CN1301
CONTACT SIDE
G CN115
CD MECHA
(ANP7409-B)

SIDE A


IC1101
IC1301
IC3002
IC1201
To CD MECHA
E CN111
D 110
CONTACT SIDE
CN1101
CN111
AWU7836
MOTHER ASSY
IC1101
IC1201
IC1301
IC3002
OPEN SIDE
CN1302
CN12
HPR
GNDR
HPL
GNDD
CDMUTE
HPDET
F HP ASSY
AWU7840
HP ASSY
CN3901
JA3901
(ANP7409-B)
C LOAB ASSY
LOAB
VNP1836-B
S101
CN602
CN601
VWG2279- -000-KD
(VNP1836-B)
LOADING
MOTOR
ASSY

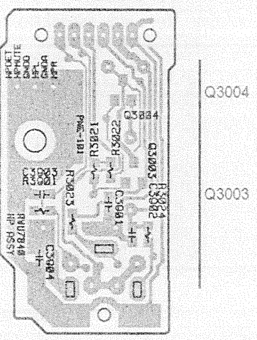
A

B MOTHER ASSY


Q5901
Q1201
Q3001
Q5952
Q5905
IC1201
IC3002
IC1101
IC1301
Q1101
Q1102
Q1301
Q5506
AWU7836 MOTHER ASSY
IC1201
IC1301
Q1201
Q1301
IC3001
IC5901
Q5951
D5900
D5950
FOCUS ERR
TRKG ERR
SPDL ERR
FOCS DEFECT
RFCC
TEB
VCDS
SVSV
SVREF
BUS
BUS
BUS
BUS
BUC
PNE-1B1
LOAD+
LOAD-
D3004
D3010
L5951

B

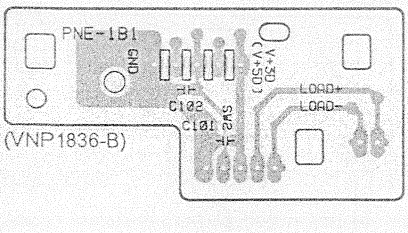
F HP ASSY


Q3004
Q3003
PNE-1B1
R3021
R3022
R3023
R3024
C3001
C3002
C3003
C3004
Q3005

(ANP7409-B)

C

C LOAB ASSY

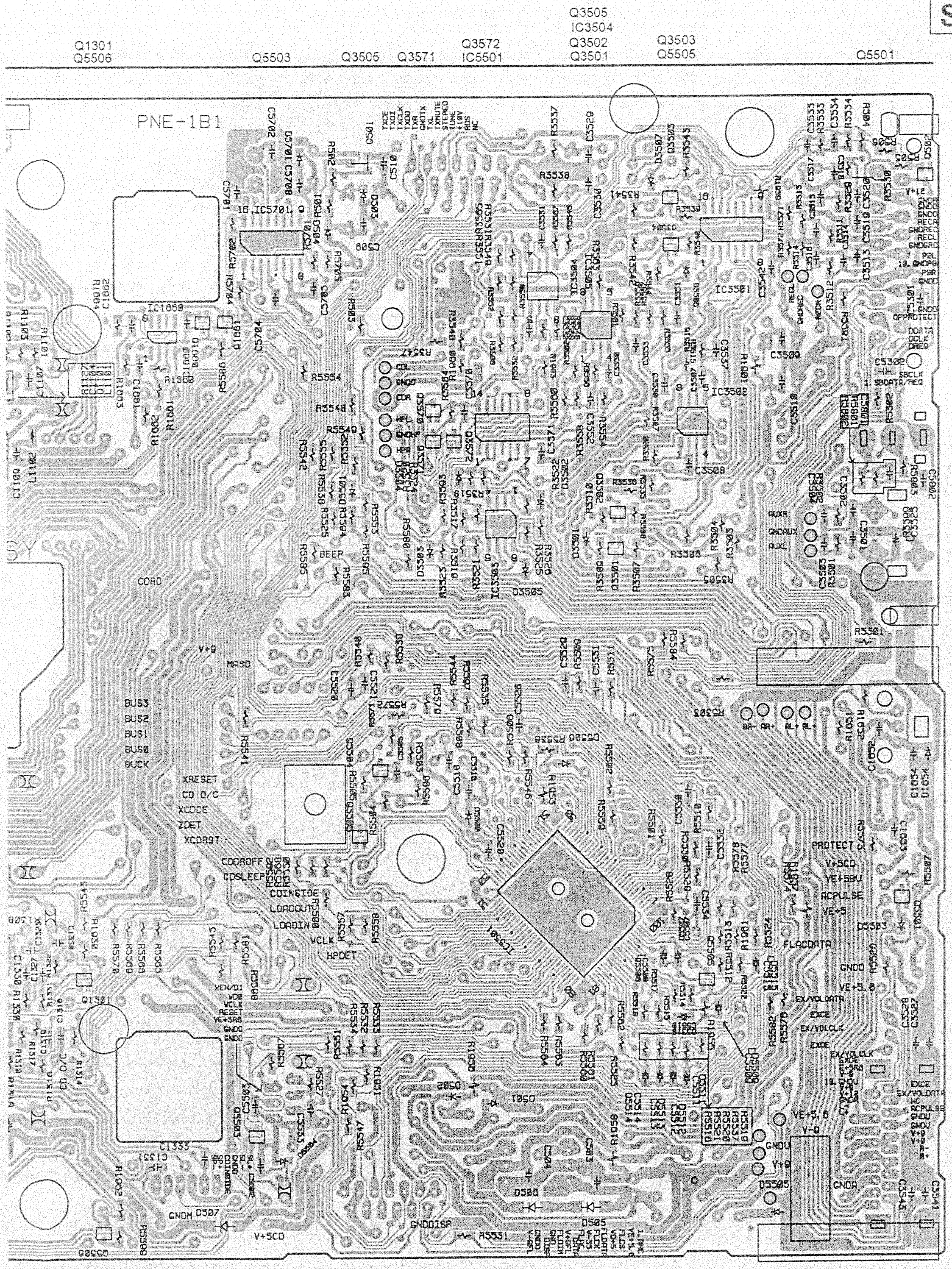

PNE-1B1
GND
V+5D
(V+5D)
LOAD+
LOAD-
C102
C101
SW2

(VNP1836-B)

(ANP7409-B)

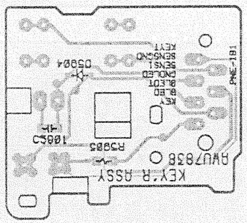
D

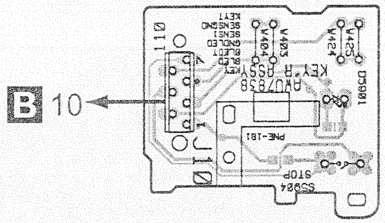
SIDE B


Q1301
Q5506
Q5503
Q3505
Q3571
Q3572
IC5501
Q3505
IC3504
Q3502
Q3501
Q3503
Q5505
Q5501
PNE-1B1
IC1000
IC5701
IC3501
IC3502
IC3503
CORD
V+9
BUS3
BUS2
BUS1
BUS0
BUCK
XRESET
CD O/C
XCDCE
ZDET
XCDRST
CDOROFF
CDSLEEP
COINSIDE
LOADOUT
LOADIN
VCLK
HPDET
BEEP
AUXR
GNDAUX
AUXL
PROTECT
V+5CD
VE+5BU
ACPULSE
VE+5
FLACDATA
GNDD
VE+5.6
EX/VOLDATA
EXCE
EX/VOLCLK
VE+5.6
V-9
GNDU
V+9
GNDA
GNDM
V+5CD
GNDDISP
R5531
D507
D506
D505
R3301
SSCLK
SSDATA/REQ
PROTECT
CDDATA
CDCLK
CDREQ
PBL
PBR
RECL
RECR

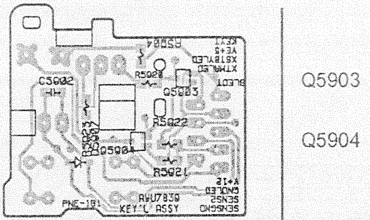
4.3 KEYR, KEYL and FLAC ASSYS

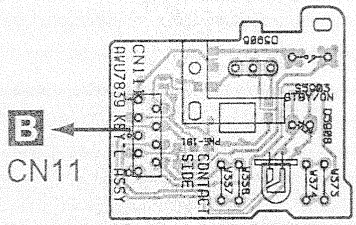
D KEYR ASSY


D5904
C5901
R5905
AWU7838
KEY'R ASSY
PNE-1B1

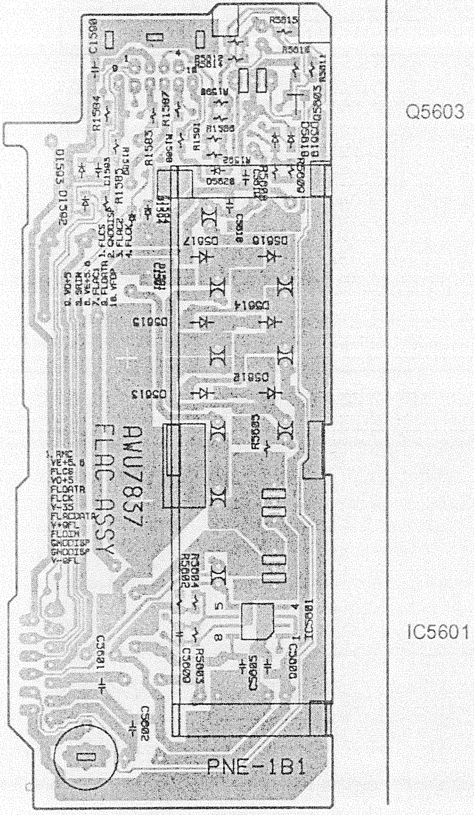

B
10
J110
KEY'R ASSY
AWU7838
STOP
S5904
D5901

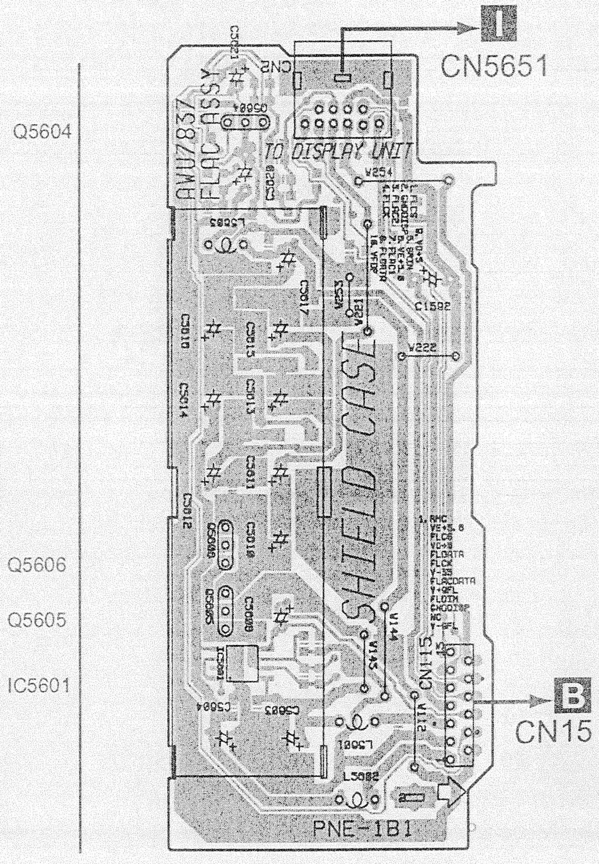
E KEYL ASSY


Q5903
Q5904
C5902
R5904
Q5903
AWU7839
KEY'L ASSY
PNE-1B1


B
CN11
CN11
AWU7839 KEY'L ASSY
CONTACT SIDE
D5906
S5903
STBY/ON
D5908

G FLAC ASSY


Q5603
IC5601
AWU7837
FLAC ASSY
PNE-1B1


Q5604
Q5606
Q5605
IC5601
I
CN5651
AWU7837
FLAC ASSY
TO DISPLAY UNIT
SHIELD CASE
CN15
B
CN15
PNE-1B1

(ANP7409-B)

(ANP7409-B)

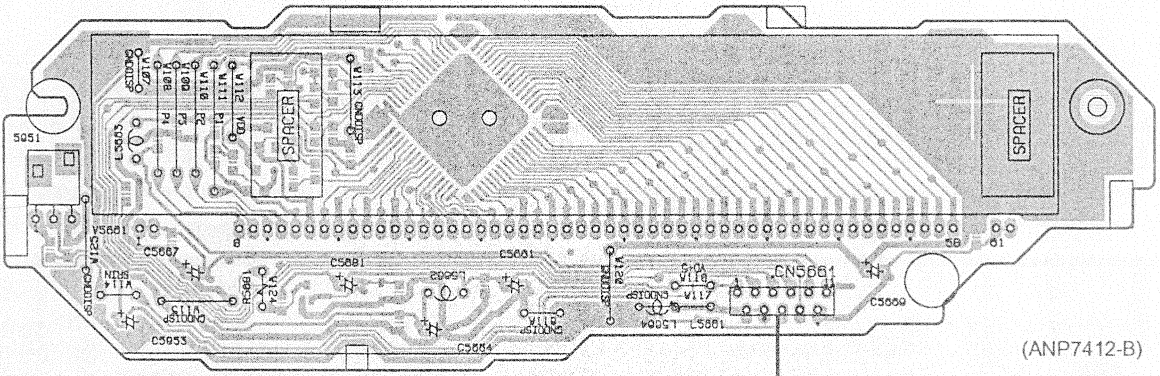
SIDE A

SIDE B

4.4 FLDP and CNB ASSYS

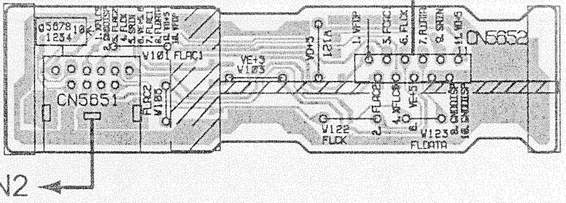
H FLDP ASSY

SIDE A


SPACER
SPACER
5051
V5661
C5667
C5681
C5661
L5682
R5681
C5653
C5664
CN5661
L5681
L5684
C5669
V121
V120
V117
V118
V119
V112
V111
V110
V109
V108
V107
V115
P1
P2
P3
P4
VDD
L5683
GNDDISP
SRIN
1
8
58
61

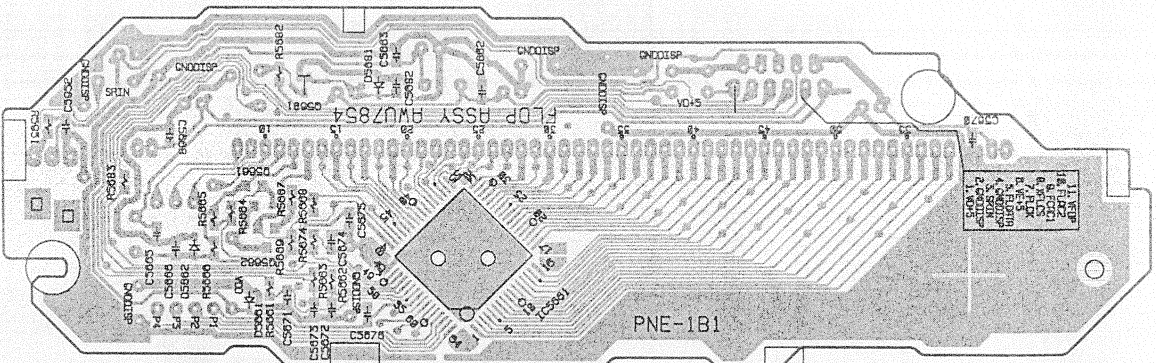
(ANP7412-B)

I CNB ASSY


CN5651
CN5652
V101 FLAC1
VE+5
V103
FLAC2
V105
VD+5
V121
1.VFDP
3.FDIC
5.FLCK
7.FLDATA
9.SRIN
11.VD+5
2.FLAC2
4.FLAC1
6.VE+5
8.GNDDISP
10.GNDDISP
V122
FLCK
V123
FLDATA
G CN2

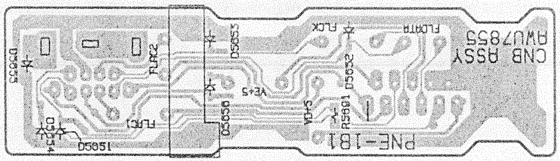
(ANP7412-B)

SIDE B


FLDP ASSY AWU7854
PNE-1B1
IC5661
GNDDISP
SRIN
VD+5
C5652
R5682
R5683
R5685
R5684
R5687
R5688
R5674
R5673
R5672
C5675
C5674
C5676
C5681
D5681
C5682
D5682
C5683
R5681
C5665
C5666
C5667
C5668
C5662
C5672
C5673
C5671
C5678
P1
P2
P3
P4
VDD

Q5661 Q5681 IC5661

(ANP7412-B)


CNB ASSY
AWU7855
PNE-1B1
FLAC2
FLAC1
VE+5
VD+5
FLCK
FLDATA
D5651
D5652
D5653
D5655
D5656
R5651

(ANP7412-B)

5. PCB PARTS LIST

NOTES: ● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

$560\,\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ .... *RD1/4PU* $\boxed{5}\boxed{6}\boxed{1}$ *J*
$47k\,\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ .... *RD1/4PU* $\boxed{4}\boxed{7}\boxed{3}$ *J*
$0.5\,\Omega \rightarrow R50$ .... *RN2H* $\boxed{R}\boxed{5}\boxed{0}$ *K*
$1\,\Omega \rightarrow 1R0$ .... *RS1P* $\boxed{1}\boxed{R}\boxed{0}$ *K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

$5.62k\,\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ .... *RN1/4PC* $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

LIST OF PCB ASSEMBLIES

Mark	No.	Description	Part No.
		FM/AM TUNER MODULE	AXQ7229
NSP		CD COMP	AWM7629
		├─MOTHER ASSY	AWU7836
		├─FLAC ASSY	AWU7837
		├─KEYR ASSY	AWU7838
		├─KEYL ASSY	AWU7839
		└─HP ASSY	AWU7840
		DISPLAY	AWM7633
		├─FLDP ASSY	AWU7854
		└─CNB ASSY	AWU7855
NSP		LOADING MECHAISM ASSY	AXA7101
NSP		└─LOAB ASSY	AWG2279

A FM/AM TUNER MODULE

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC201		BA1451F
	IC202		LC72131MD-TFB
	Q201, Q204, Q205, Q601		2SC2412K
	Q202		DTA124ES
	Q203		DTC124EK
	D201		1SS133
	D202		MTZJ5.1C
	D101		UDZS6.8B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L201	FM DETECTOR COIL	ATE7003
	F202	CERAMIC FILTER	ATF-107
	F201	CERAMIC FILTER	ATF-119
	F203	AM CERAMIC FILTER	ATF1155
	F601	ANTIBIRDY FILTER	ATF7025
	L601		LCTA270J2520

CAPACITORS

Mark	No.	Description	Part No.
	C605		CCSQCH680J50
	C212, C213, C226, C233–C235		CCSRCH101J50
	C240, C614		CCSRCH101J50
	C206		CCSRCH120J50
	C231, C232		CCSRCH150J50
	C223		CEAT100M50
	C229		CEAT101M10
	C224		CEAT1R0M50
	C227		CEAT220M25
	C241		CEAT2R2M50
	C243		CEAT330M16
	C228		CEAT3R3M50
	C237		CEAT470M10
	C211		CEJA1R0M50
	C210		CEJA470M16
	C103, C104, C204, C238		CKSRYB102K50
	C102, C208, C216, C217, C220		CKSRYB103K50
	C239, C242, C604, C615		CKSRYB103K50
	C225		CKSRYB153K50
	C607, C608		CKSRYB182K50
	C201, C205, C214, C230, C236		CKSRYB223K50
	C244		CKSRYB223K50
	C221		CKSRYB224K10
	C603		CKSRYB392K50
	C215		CKSRYB471K50
	C202, C222		CKSRYB473K16
	C606		CKSRYB561K50

RESISTORS

Mark	No.	Description	Part No.
	R211		RD1/4PU221J
	R221		RD1/4PU222J
	R233		RD1/4PU391J
	R103, R104		RS1/10S221J
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN201	13P CONNECTOR	52044-1345
	BN201	2P TERMINAL WITHPAL	AKA7002
	0	SHIELD CASE T	ANK7072
	0	SHIELD CASE B	ANK7073
	X201	CRYSTAL RES.(7.2MHz)	ASS1093
	0	FM FRONT END	AXF7004
		AM RF TUNING BLOCK	AXX7072

B MOTHER ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
⚠	IC3001		BA4558F-HT
	IC3502-IC3505		BA4558F-HT
	IC5701		BU1923F
	IC3501		BU4052BCF
	IC3506		BU4066BCF
⚠	IC1301		M56788AFP
⚠	IC3002		M62421FP
	IC5901		NJM062M
⚠	IC501		NJM7805FA
⚠	IC502		NJM7905FA
	IC5501		PDC079A
⚠	IC1101		TA2150FN
⚠	IC1660		TC7WU04F
⚠	IC1201		TC9495F
	Q1101		2SA1577
	Q501		2SC2412K
	Q3501-Q3504, Q502, Q5501, Q5504		2SC4081
	Q5905		2SC4081
	Q3005, Q3006		2SD2114K
	Q1201, Q1661, Q3505, Q3570		DTA124EUA
	Q5951, Q5952		DTC114TUA
	Q5503		DTC143EUA
	Q1301, Q1660, Q3571, Q3572		UN5212
	Q5505, Q5506		UN5212
	D505–D507		1SR154-400
	D1201, D3010, D3501, D3506, D3507		1SS355
	D504, D5501, D5503, D5504, D5506		1SS355
	D5951-D5960		1SS355
	D3502-D3505, D503		UDZ11B
	D5701		UDZS5.1B
	D5505		UDZS6.8B

COILS AND FILTERS

Mark	No.	Description	Part No.
	X5701	CRYSTAL RES.(4.3MHz)	ASS7004
	X5501	CERAMIC RES.(10MHz)	DSS1048
	L1206, L1651, L5501, L5952		LFEA220J
	L1201		LFEA2R2J
	L3001		LFEA680J
	X1201	CRYSTAL RES.	PSS1008

CAPACITORS

Mark	No.	Description	Part No.
	C5519		BCH1072
	C1119, C3513-C3520, C5511-C5514		CCSRCH101J50
	C5520, C5521, C5529-C5533		CCSRCH101J50
	C1201		CCSRCH150J50
	C1307		CCSRCH151J50
	C1202, C1209		CCSRCH220J50
	C5509		CCSRCH221J50
	C5701, C5702		CCSRCH270J50
	C5704		CCSRCH271J50
	C3501-C3504, C3528		CCSRCH331J50
	C1117		CCSRCH390J50
	C1210, C1303, C3003, C3004		CCSRCH470J50
	C1237, C1263		CCSRCH471J50
	C5705		CCSRCH561J50
	C5534		CCSRCH681J25
	C1116		CCSRCK2R0C50
	C3021, C3022		CEAL100M50
	C1101, C1102, C1108, C1115, C1203		CEAL101M10
	C1205, C1222, C1224, C1228, C1231		CEAL101M10
	C1236, C1321, C1328, C3014		CEAL101M10
	C3001, C3002		CEAL3R3M50
	C3025, C3026, C5955		CEAL470M16
	C5951, C5952		CEAL4R7M50
	C3015, C3016		CEALNP470M6R3
	C5703		CEAT100M50
	C1651, C3511, C3512, C501, C502		CEAT101M10
	C505, C506, C5506, C5517, C5707		CEAT101M10
	C5504		CEAT1R0M50
	C3523, C3524, C3535, C3536		CEAT220M50
	C3539, C3540		CEAT220M50
	C3521, C3522		CEAT2R2M50
	C508		CEAT470M16
	C5501		CEJQ100M50
	C3009		CEJQ221M6R3
	C3537, C3538		CKSQYB104K25
	C1241, C1249, C1250, C5507, C5508		CKSRYB102K50
	C5801, C5802, C5953, C5954		CKSRYB102K50
	C1103, C1107, C1114, C1130, C1204		CKSRYB103K50
	C1206, C1207, C1212, C1214, C1223		CKSRYB103K50
	C1225, C1227, C1232, C1239, C1245		CKSRYB103K50
	C1315, C1316, C1330, C1652, C1653		CKSRYB103K50
	C3008, C3010, C3013, C3509, C3510		CKSRYB103K50
	C3550, C3551, C3570, C3571, C509		CKSRYB103K50
	C5502, C5526, C5708, C5956		CKSRYB103K50
	C5981, C5982		CKSRYB103K50
	C1104, C1110, C1111, C1131, C1218		CKSRYB104K16
	C1226, C1322, C1325, C1327, C1350		CKSRYB104K16
	C5510, C5515		CKSRYB152K50
	C1211		CKSRYB153K50
	C1660-C1662		CKSRYB183K25
	C1213		CKSRYB222K50
	C3552, C3553		CKSRYB223K25
	C1112, C1113		CKSRYB224K10
	C1216, C1217		CKSRYB473K25
	C1141, C1311, C1319		CKSRYB682K50
	C3011, C3527, C5503, C5505, C5516		CKSRYF104Z25
	C5518, C5528		CKSRYF104Z25
	C3012		CKSRYF105Z10

RESISTORS

Mark	No.	Description	Part No.
	R1901, R1950, R1953, R1955-R1959		RS1/10S0R0J
⚠	R5573		RS1/16S103J
	R1318		RS1/16S1202F
	R3549, R3550, R3565-R3568		RS1/16S2200F
	R1319		RS1/16S2202F
	R1317		RS1/16S2702F
	R3519-R3522, R3531, R3532		RS1/16S4701F
	R3545-R3548, R3551, R3552		RS1/16S4701F
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	10	7P CABLE HOLDER	51063-0705
	CN11	9P FFC CONNECTOR	52045-0945
	CN1	13P FFC CONNECTOR	52045-1345
	CN12	6P JUMPER CONN.	52147-0610
	CN4	19P SOCKET	AKP7001
	CN15	13P PLUG	AKP7059
	CN3	20P SOCKET	AKP7129
	BZ1660	BUZZER	APV7002
	CN1302	KR CONNECTOR	B5B-PH-K
	CN1301	KR CONNECTOR	B6B-PH-K
	JA5851	MINI JACK	DKN1124
	JA1651	OPTICAL LINK JACK	GP1FA501TZ
	JA3501	2P PIN JACK	RKB1041
	CN1101	FCC CONNECTOR	SLW15S-1C7
	KN1299	EARH METAL FITTING	VNF1084

G FLAC ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5601		BA4558F-HT
	Q5606		2SB1237X
	Q5604		2SB1238X
	Q5603		2SC2412K
	Q5605		2SD1858X

Mark	No.	Description	Part No.
	D5612-D5617		1SR154-400
	D5618, D5619		1SS355
	D5620		UDZS6.8B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L5601-L5603		LFEA680J

CAPACITORS

Mark	No.	Description	Part No.
	C1591, C1593, C1594		CCSRCH101J50
	C5608		CEAL100M50
	C5603, C5604		CEAL101M10
	C5612		CEAL470M35
	C5620, C5621		CEAT100M50
	C1592		CEAT101M10
	C5610, C5611, C5613-C5617		CEJQ470M25
	C5601, C5602, C5605, C5606		CKSRYB473K25
	C5618, C5619		CKSRYB473K25
	C1590		CKSRYF104Z25

RESISTORS

Mark	No.	Description	Part No.
	R5605		RS1/10S1R0J
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN115	13P SOCKET	AKP7070
	CN2	10P CONNECTOR	AKP7134
	1	SHIELD CASE CD	ANK7091
	2	PCB BINDER	VEF1040

D KEYR ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	D5901	LED(BLUE)	E1L55-3B0A

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	S5904		ASG7013

CAPACITORS

Mark	No.	Description	Part No.
	C5901		CKSRYF104Z25

RESISTORS

Mark	No.	Description	Part No.
	R5905		RS1/16S682J

OTHERS

Mark	No.	Description	Part No.
	110	7P JUMPER WIRE	51063-0705
	J 10	7P CABLE HOLDER	D15A07-100-2651

E KEYL ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q5903, Q5904		DTA124EUA
	D5908	LED(BLUE)	E1L55-3B0A
	D5906	LED(RED, GREEN)	VRPG5615S

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	S5903		ASG7013

CAPACITORS

Mark	No.	Description	Part No.
	C5902		CKSRYF104Z25

RESISTORS

Mark	No.	Description	Part No.
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN111	9P FFC CONNECTOR	52045-0945

F HP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	Q3003, Q3004		2SD2114K
	Q3001		DTA124EUA

CAPACITORS

Mark	No.	Description	Part No.
	C3903, C3904		CKSRYB103K50
	C3901, C3902		CKSRYB473K25

RESISTORS

Mark	No.	Description	Part No.
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	112	6P CABLE HOLDER	51048-0600
	3901	MINI JACK	AKN7026
	J 12	6P JUMPER WIRE	D20PYY0605E
	KN3901	EARTH METAL FITTING	VNF1084

H FLDP ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	IC5661		MSM9202-01
	Q5681		UN5212
	D5681		1SS355
	D5661		UDZS8.2B

COILS AND FILTERS

Mark	No.	Description	Part No.
	L5663		LAU100J
	L5662		LAU220J

CAPACITORS

Mark	No.	Description	Part No.
	C5674		CCSRCH470J50
	C5681		CEJQ100M16
	C5661, C5664		CEJQ101M10
	C5669		CEJQ330M35
	C5953		CEJQ470M16
	C5671-C5673		CKSRYB102K50
	C5679, C5682		CKSRYB103K50
	C5662, C5663, C5665, C5666, C5668		CKSRYF473Z50
	C5670, C5675, C5952		CKSRYF473Z50

RESISTORS

Mark	No.	Description	Part No.
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	V5661	FL TUBE	AAV7082
	CN5661	11P SOCKET	AKP7069
	5951	REMOTE RECEIVER UNIT	GP1UM27XK

I CNB ASSY

SEMICONDUCTORS

Mark	No.	Description	Part No.
	D5656		1SS355
	D5655		UDZ2.0B
	D5651-D5654		UDZS8.2B

RESISTORS

Mark	No.	Description	Part No.
	Other Resistors		RS1/16S□□□J

OTHERS

Mark	No.	Description	Part No.
	CN5652	11P PLUG	AKP7058
	CN5651	10P CONNECTOR	AKP7134

J LOAB ASSY

SWITCHES AND RELAYS

Mark	No.	Description	Part No.
	S101		VSK1011

OTHERS

Mark	No.	Description	Part No.
	CN602	CONNECTOR POST	S2B-PH-K
	CN601	CONNECTOR POST	S5B-PH-K
		PC BOARD LOAB	VNP1836

6. ADJUSTMENT

6.1 TEST MODE

Kind of test mode
The following four modes exist.
There is no information to be shown in this CD adjustment .

1-1. TEST mode.	: For adjustment in main body distance of production line
1-2. Unit TEST mode.	: For inspection by the function checker of production line

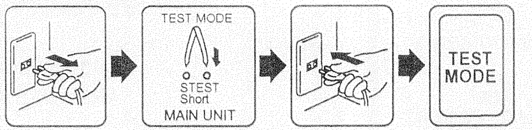
1-3. Service TEST mode. : For inspection by service
It is not possible to operate at all by recognition because of there is no AC pulse if it is CD tuner alone and there is no part AMP as the power failure.
Then, to be able to move the CD tuner, mode yet in the inconvenience without the part AMP.
It is possible to operate only in the CD tuner even if the part AMP is not connected.
An initial function becomes CD if the product starts in this mode, and CD becomes CD TEST mode different from a usual operation.
Even if the function is returned to the CD function again, the product does not become CD TEST mode when the function is made functions other than CD once. The product becomes a usual CD operation.
To put the product from the state in the CD TEST mode, the remote control code of A25F is received.

1-4. CD TEST mode. : For inspection by service
When the remote control code of A25F is received at the CD function when it is on, power becomes CDTEST mode.
The CD tuner is effective to this even the ordinary mode.
However, the product becomes off this mode when the function is changed besides CD.
The step in the part CD can operate. From LD ON to SPDL LOCK , TRKG ON/OFF and etc.

6.1.1 How to Start/Cancel Service Test Mode

NOTE: There is no information to be shown in this CD adjustment.

TEST MODE : ON



An initial function becomes CD, then becomes CD TEST MODE. And becomes a blank display [:].

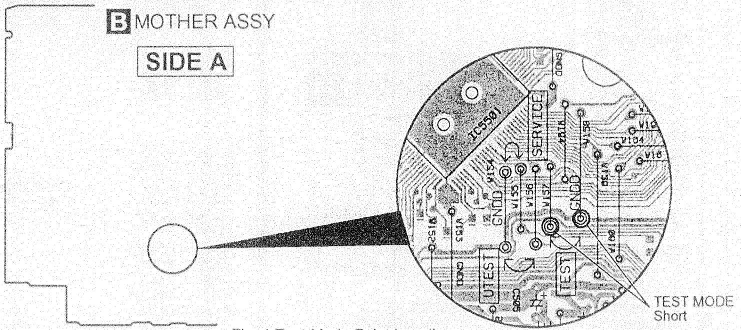
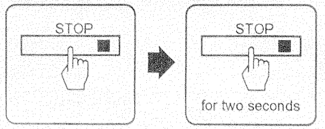


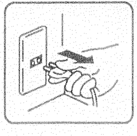
Fig. 1 Test Mode Point Location

CD TEST MODE : CANCEL



The function is changed.
Becomes a usual CD operation

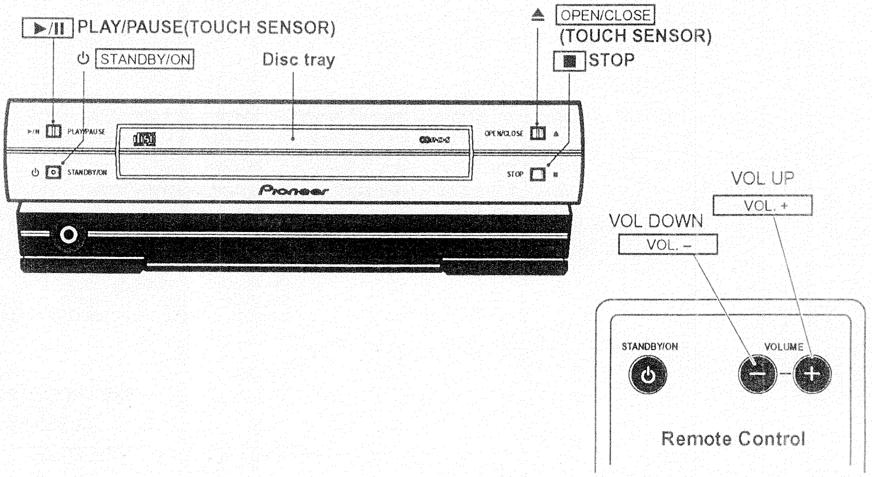
TEST MODE : STOP



6.1.2 Function And Operation In CD Test Mode

Main body key	Single goods CD remote control unit	Operation condition	Content of operation	FL display
OPEN/CLOSE	(None)	When CD STOP	The CD tray opens and close.	
STOP	STOP	When CD STOP	The function is changed.	
		When Servo ON	All servos are turned off.	CD :
POWER (*1)	RANDOM (A24A)	When CD STOP	LD is turned on, and auto focus is done.	FOCUS ON
PLAY/PAUSE	PLAY (A217)	After FOK	The spindle is kicked. And, the self adjustment processing tracking servo is turned on and MUTE is released. (*2)	SPNDL KICK ↓ SERVO ON
PLAY/PAUSE	PLAY (A217)	When TRK SERVO OFF	The tracking servo is turned on, and MUTE is released.	SERVO ON
PLAY/PAUSE	PLAY (A217) PAUSE (A218)	When TRK SERVO ON	The tracking servo is turned off, and MUTE is put.	SERVO OFF
VOL UP	TRK UP (A210)	When TRK SERVO ON	The tracking servo is turned off, MUTE is put, and the slider is moved in the direction of FWD.	CD XX : XX ↓ SERVO OFF
VOL DOWN	TRK DOWN (A211)	When TRK SERVO ON	The tracking servo is turned off, MUTE is put, and the slider is moved in the direction of RVS.	CD XX : XX ↓ SERVO OFF
(None) (*3)	PGM (A20D)	When CD has Stopped	LDON → Auto focus → Spindle kick → Self adjustment → TOC lead → The 2th search → Tracking servo ON → MUTE release	FOCUS ON ↓ SPNDL KICK ↓ SERVO ON

*1 Method of making POWER OFF when there is no remote control.
The function is changed besides CD keeping pushing the STOP key again for two seconds after CD is stopped with the STOP key.
And, please push the POWER key.
*2 If the slider is not sent to outer a little to turn on the servo by surroundings the in DISC, the sound is not occasionally emitted.
*3 It is possible to operate only by remote control for the unit check mode.



6.2 TUNER SECTION

■ AM Tuner Section

- There is no adjustment in the AM tuner.

■ FM Tuner Section

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	ANT. Input level and signal condition			Adjustment	
		Frequency (MHz)	Modulation	Input Level (dBμV)	Adjust point	Contents
1	T-METER Adjustment	98	OFF	80	L201	Adjust L201 so that the DC voltage between Pin 21 and Pin 23 of IC201 (Test point Vtm) gets within 0 ± 50mV.

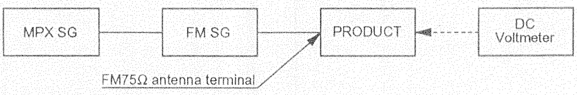

MPX SG
FM SG
PRODUCT
DC Voltmeter
FM75Ω antenna terminal

Fig.1 Adjustment Wiring Diagram

A FM/AM TUNER MODULE

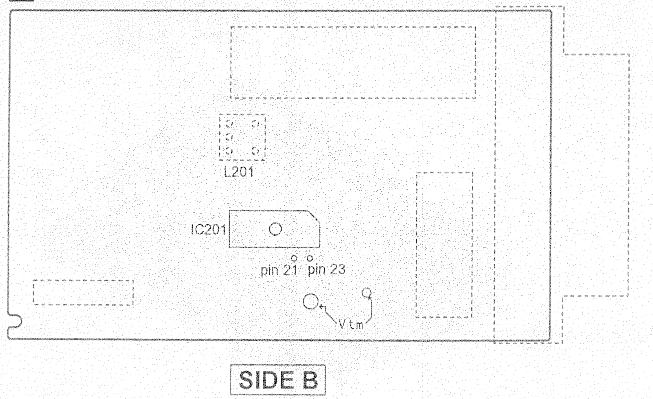

L201
IC201
pin 21
pin 23
Vtm
SIDE B

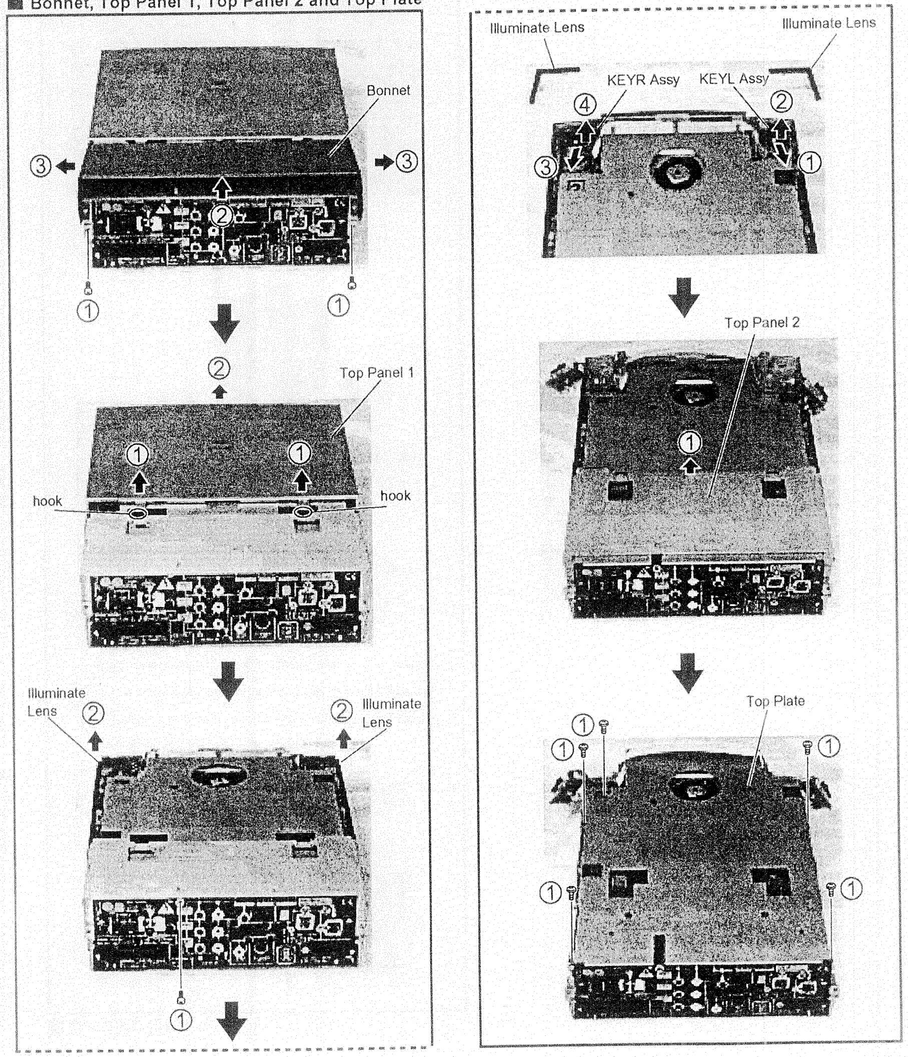
Fig.2 Adjustment Point

7. GENERAL INFORMATION

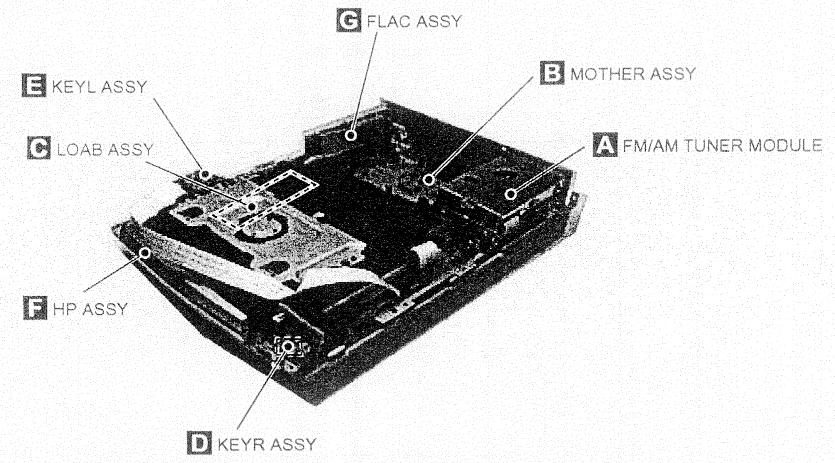
7.1 DISASSEMBLY

■ DIAGNOSIS OF PCBs

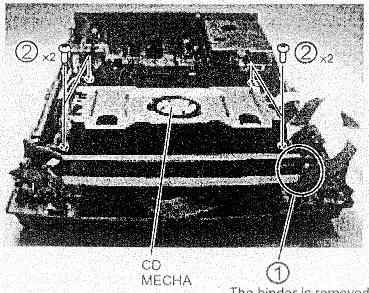
■ Bonnet, Top Panel 1, Top Panel 2 and Top Plate


Bonnet
③
②
①
Top Panel 1
hook
hook
Illuminate Lens
Illuminate Lens
Illuminate Lens
Illuminate Lens
KEYR Assy
KEYL Assy
④
Top Panel 2
Top Plate

■ PCB Location

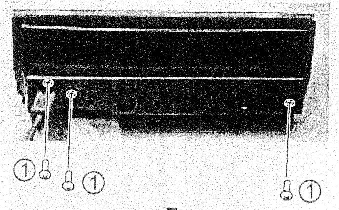

G FLAC ASSY
E KEYL ASSY
B MOTHER ASSY
C LOAB ASSY
A FM/AM TUNER MODULE
F HP ASSY
D KEYR ASSY

■ CD MECHA


② x2
② x2
CD
MECHA

① The binder is removed.

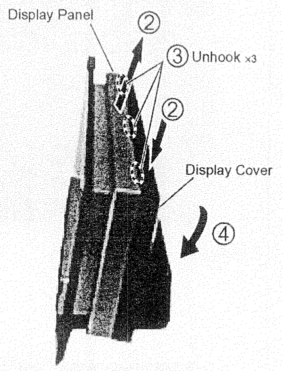
■ Display Unit

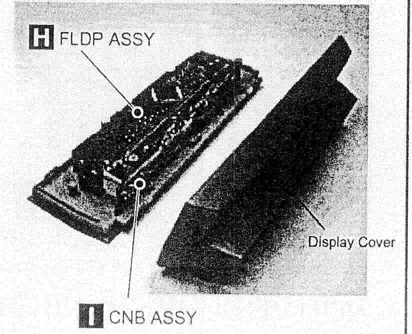


② Display Panel and Display Cover are vertically moved.

③ The hook three places of the upper part are removed.

④ Removes while rotating Display Cover in the direction of the arrow.


Display Panel
②
③ Unhook x3
②
Display Cover
④


H FLDP ASSY
Display Cover
I CNB ASSY

7.2 PARTS

7.2.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC079A (MOTHER ASSY : IC5501)

• System Control IC

● **Pin Function**

No.	Pin Name	I/O	MOS	Function	Pin Function	Active
1	FLACDATA	O	C	Port	FL AC Control Data	-
2	BUS0	I/O	C	Port	CD LSI Communication Bus	-
3	BUCK	O	C	Port	CD LSI Communication Bus Clock	-
4	BEEP	O	C	Port	BEEP Output	
5	TXMUTE	O	C	Port	FM/AM Tuner module Mute	
6	TXCLK	O	C	Port	FM/AM Tuner module Control Clock	-
7	TXDI	O	C	Port	FM/AM Tuner module Control Data	
8	TXCE	O	C	Port	FM/AM Tuner module Control CE	
9	XRDSON	O	C	Port	RDS Decoder Control (H : Stop)	L
10	XFLCS	O	C	Port	FL Connect Signal	-
11	XRESET	I	-	RESET	RESET	L
12	(NC)	-	-		Connect VDD1 for Not used	-
13	(NC)	-	-		Open for Not used	-
14	GND	-	-	GND	GND	-
15	CF1	-	-	SERALOCK	Seramic resonator Connected terminal	-
16	CF2	-	-	SERALOCK	Seramic resonator Connected terminal	-
17	VDD1	-	-	VDD	VDD	-
18	ST/TUNE	O	N	Port	FL Driver Hardware Reset	L
19	KEY	I	N	Anarog Input	KEY Input	-
20	CD O/C	I	N	Anarog Input	CD DOOR SW Input	-
21	OPPROTECT	O	N	Port	Not used	-
22	(NC)	O	N	Port	Not used	-
23	XCDRST	O	N	Port	CD LSI Hardware Reset	L
24	PROTECT	I	N	Anarog Input	Measures of short test with Summing circuit	-
25	DSTN	I	N	Anarog Input	Destination Switch	-
26	ACPULSE	I	N	INT0 Port	AC Pulse Input	-
27	XCDCE	O	C	INT1 Port	CD LSI CE	
28	RDSCLK	I	C	INT2 Port	Clock Input from RDS Decoder (Without RDS : Low Output)	-
29	SR IN	I	C	INT3 Port	System Remote Control Signal Input	-
30	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
31	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
32	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
33	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
34	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
35	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
36	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
37	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
38	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
39	(NC)	O	P	Port	Not used	-
40	(NC)	O	P	Port	Not used	-
41	(NC)	O	P	Port	Not used	-
42	(NC)	O	P	Port	Not used	-
43	(NC)	O	P	Port	Not used	-
44	(NC)	O	P	Port	Not used	-
45	(NC)	O	P	Port	Not used	-
46	VDD	-	-	VDD	VDD	-
47	(NC)	O	P	Port	Not used	-
48	(NC)	O	P	Port	Not used	-
49	XCDDROFF	O	P	Port	CD Door Driver Control ON/OFF (0 : OFF, 1 : Drive ON)	L
50	CDSLEEP	O	P	Port	CD LSI Function Stop (0 : OFF, LSI Stop : LSI Operation)	H
51	GND	-	-	GND	GND	-
52	ZDET	I	P	Port	CD Zero Detection Input	
53	CDINSIDE	I	P	Port	CD INSIDE SW Input	
54	LOADIN	O	P	Port	CD Door Driver Control (Direction where door is closed)	H
55	LOADOUT	O	P	Port	CD Door Driver Control (Direction where door is opened)	H
56	ATT	O	P	Port	LINE Input ATT Control	L
57	WCLK	O	P	Port	For Flash Rewrite	L
58	SBD1	O	P	Port	DISC LED Control, lights brightly *3	H
59	NC	O	P	Port	DISC LED Control, lights a little darkly *3	H
60	OPPWR	O	P	Port	DISC LED Control, lights considerably darkly *3	H
61	HP DET	O	P	Port	Infrared RadiationControl for Sensor	L
62	FLDIMA	O	P	Port	FL Dimmer Control A	
63	FLDIMB	O	P	Port	FL Dimmer Control B	
64	CDRD	O	P	Port	Not used	
65	TXDO	I	P	Port	Data Input from FM/AM Tuner module	-
66	RDSDATA	I	P	Port	Data Input from RDS Decoder	-
67	TEST	I	P	Port	CD Core Checker Mode Detection Jumper	
68	UTEST	I	P	Port	Unit Test Mode Detection Jumper	L
69	SERVICE	O	P	Port	Service Mode Detection Jumper	H
70	TXSW	O	P	Port	TX SW Output	H
71	4052B	O	P	Port	BU4052BCF Control A *1	-
72	VDD	-	-	VDD	VDD	-
73	4052A	O	P	Port	BU4052BCF Control B *1	-
74	MA SD	O	P	Port	Not used	-
75	CD MUTE	O	P	Port	CD Mute Output	L
76	HP MUTE	O	P	Port	H.P AMP Mute	L
77	(NC)	O	P	Port	Not used	L
78	(NC)	O	P	Port	Not used	L
79	XTMRLED	O	P	Port	Timer Standby Display LED Control	-
80	XSTBYLED	I	P	Port	Standby Display LED Control	-
81	BULLEDL	O	P	Port	Not used	-
82	BULLEDM	O	P	Port	Not used	-
83	BULLEDH	O	P	Port	System Bus Received Data	-
84	XEMR	I	P	Port	Signal of emergency generation from amplifier	L
85	EXOE	O	C	Port	BU4094BCF Output E , Using combinedly with WD0 for Flash Rewrite *3	H
86	EX/V DATA	O	C	Port	BU4094BCF / VOL-IC Control Data *3	-
87	EX/V CLK	O	C	Port	BU4094BCF / VOL-IC Control Clock *3	-
88	EXCE	O	C	Port	BU4094BCF CE , Using combinedly with WEN/D1 for Flash Rewrite *3	H
89	GND	-	-	GND	GND -	
90	VDD	-	-	VDD	VDD	-
91	FL DATA	O	C	Port	FL Driver Control Data	-
92	FL CLK	O	C	Port	FL Driver Control Clock	-
93	SBDO/REQ	O	C	Port	System Bus Sending Data / Request	-
94	SBCLK	O	C	Port	System Bus Clock	-
95	DREQ	O	C	Port	Display Data Communication Request	-
96	DDATA	I	C	Hard Serial	Display Data Communication Received Data	-
97	DCLK	I	C	Hard Serial	Display Data Communication Clock	-
98	BUS3	I/O	C	Port	CD LSI Communication Bus	-
99	BUS2	I/O	C	Port	CD LSI Communication Bus	-
100	BUS1	I/O	C	Port	CD LSI Communication Bus	-

1 : *Change of function. The truth value table of BU4052BCF.

A	B	Switch turned on	Function
L	L	X0, Y0	CD
H	L	X1, Y1	AUX
L	H	X2, Y2	PB
H	H	X3, Y3	TX

***2 : The truth value table of Expander IC (BU4094BCF / M-L11 COMPLEX ASSY IC5801).**

Function Name	Port Kind	Active
OE	C-MOS	H
ACRY	C-MOS	H
SPRY	C-MOS	H
XMUTE	C-MOS	L
IND	C-MOS	H
HPPOW	C-MOS	(Not used)
WF1*	C-MOS	L
WF2*	C-MOS	L

*

Woofer Level	WF1	WF2
HIGH	H	H
MID	H	L
LOW	L	H

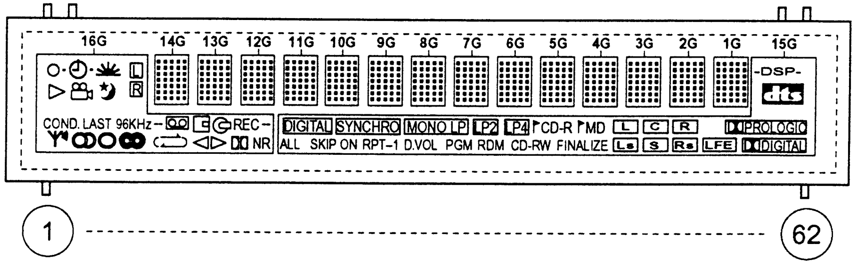
***3 : The truth value table of PLAY LED brightness.**

Brightness	DISCLED	LEDDIMA	LEDDIMB
OFF	L	L	L
LOW	L	L	H
MID	L	H	L
HIGH	H	L	L

7.2.2 DISPLAY

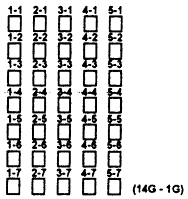
■ AAV7082 (FLDP ASSY : V5661)

- FL DISPLAY


16G
14G
13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
2G
1G
15G
-DSP-
dts
L
R
COND. LAST 96KHz
REC
DD NR
DIGITAL
SYNCHRO
MONO LP
LP2
LP4
CD-R
MD
L
C
R
DD PROLOGIC
ALL
SKIP ON RPT-1 D.VOL PGM RDM CD-RW FINALIZE
Ls
S
Rs
LFE
DD DIGITAL
1
62

● Anode Connection

	16G	15G	14G - 1G
P1	L R	-DSP-	1-1
P2	☀	dts	2-1
P3	·◷·	DD PROLOGIC	3-1
P4	○	DD DIGITAL	4-1
P5	🎥	LFE	5-1
P6	☽	Rs	1-2
P7	Y◂	S	2-2
P8	COND.	Ls	3-2
P9	○○	R	4-2
P10	○	C	5-2
P11	LAST	L	1-3
P12	●●	FINALIZE	2-3
P13	(	▶MD	3-3
P14	⧗	▶CD-R	4-3
P15	)	W	5-3
P16	96KHz	-R	1-4
P17	◀	CD	2-4
P18	▶	RDM	3-4
P19	DD NR	PGM	4-4
P20	– REC –	LP4	5-4
P21	▭	LP2	1-5
P22	◰	D.VOL	2-5
P23	⊖	MONO LP	3-5
P24	▷	–1	4-5
P25	–	RPT	5-5
P26	–	SYNCHRO	1-6
P27	–	ON	2-6
P28	–	SKIP	3-6
P29	–	DIGITAL	4-6
P30	–	ALL	5-6
P31	–	–	1-7
P32	–	–	2-7
P33	–	–	3-7
P34	–	–	4-7
P35	–	–	5-7


1-1
2-1
3-1
4-1
5-1
1-2
2-2
3-2
4-2
5-2
1-3
2-3
3-3
4-3
5-3
1-4
2-4
3-4
4-4
5-4
1-5
2-5
3-5
4-5
5-5
1-6
2-6
3-6
4-6
5-6
1-7
2-7
3-7
4-7
5-7
(14G - 1G)

● Pin Connection

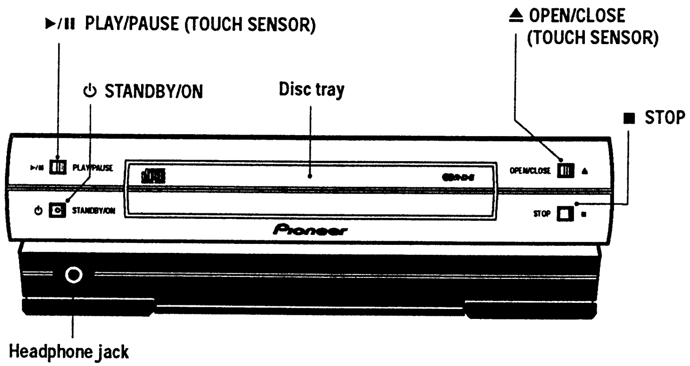
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Connection	F1	F1	NP	NP	NX	NX	NX	P4	P3	P2	P1	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	P35	P34	P33	P32
Pin No.	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
Connection	P31	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	916	P15	P14	913	P12	P11	P10	P9	P8	P7	P6	P5	NP	NP	F2	F2

F1, F2 : Filament 1G~16G : Grid NP : No Pin NX : No extend pin DL : Datum Line

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

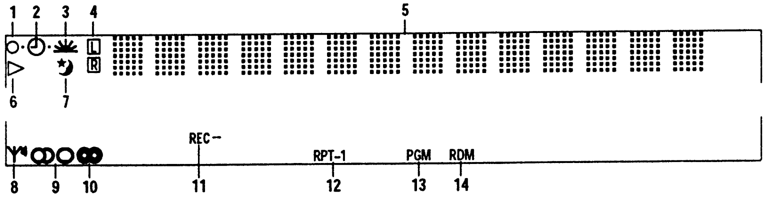
Front Panel



CD Tuner

1 CD tray
2 **Power light** – Lights when the unit is switched on.
3 **▷/⏸ button** – Press to play a disc, or pause a disc that's already playing (press again to restart playback).
4 **⏏ button** – Press to open or close the CD tray.
5 **Play light** – Lights when a CD is playing
6 **Standby/On button** – Press to switch the unit between standby and on modes. Indicator lights in standby mode. **Note:** this unit consumes a small amount of electricity in standby mode (0.9W).
7 **HeadPphone jack** – Connect a pair of headphones for private listening. When plugged in, the speakers are automatically switched off.

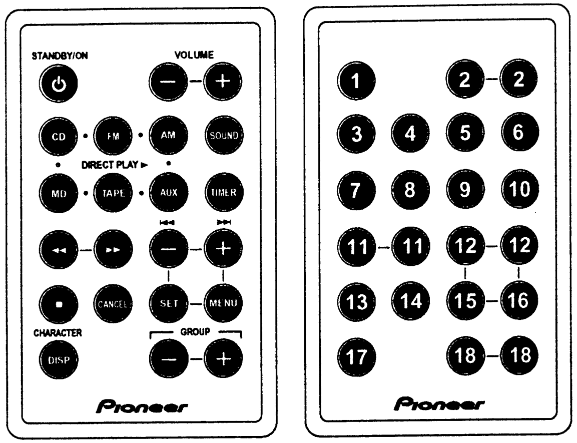
Display



1 O **Record timer** – Lights when setting the timer; flashes once set.
2 ◷ **Timer** – Lights when setting the timer; flashes once set.
3 ☀ **Wake up timer** – Lights when the wake up timer is set; flashes during wake up timer playback.
4 **STEREO Indicator** – Stereo channel indicators.
5 **Character display**

6 ▷ **Indicator** – Lights when a tape or a disc is playing mode.
7 ☾ **Sleep timer** – Lights when the sleep timer is set.
8 Ψ **Indicator** – Indicates strenghth of broadcast signal.
9 ∞O **Stereo to Mono** – Auto stereo/mono mode.
10 ∞ RDS – Lights when the tuner is in an RDS mode.
11 REC – Lights when recording to the optional tape or MD mode.
12 **RPT-1** – Lights during repeat play.
13 **PGM** – Lights during Program play.
14 **RDM** – Lights during Random play. the tape.

Remote Control



1 **STANDBY/ON** – Press to switch the unit between standby and on modes.
Note: this unit consumes about 1W of electricity in standby mode.

2 **+** – Use to raise the volume.
- – Use to lower the volume.

3 **CD mode** – Press to switch the sound to CD and start the disc playing (if there's one loaded).

4 **FM Tuner mode** – Press to switch the sound to tuner, switch between FM and switch between preset station memories.

5 **AM Tuner mode** – Press to switch the sound to tuner, switch between AM and switch between preset station memories.

6 **SOUND** – Press to put the |◁◁ and ▷▷| buttons into tone, subwoofer level and balance control mode.

7 **MD mode** – Press to switch the sound to MD and start the disc playing (if there's one loaded).

8 **Tape deck mode** – Press to switch the sound to tape deck and start the tape playing (if there's one loaded).

9 **AUX mode** – Press to switch the sound to the component connected to the AUX inputs.

10 TIMER/CHARACTER – Press to start setting the timer. Also use to select characters when naming tuner station memories, etc.

11 ◁◁ ▷▷ buttons – Press to fast-reverse / fast-forward scanning.

12 |◁◁ ▷▷| buttons – Press to fast-reverse / fast-forward the CD/MD/tape.

13 □ STOP – Press to stop playback (or recording) of the CD/MD/tape.

14 CANCEL – Also use to cancel operations, such as setting the clock, before the SET button has been pressed.

15 SET – Press to finish operations such as setting the clock, setting the reverse mode, and so on.

16 MENU – Press to access various features, including station memory naming, changing the tape reverse mode, and so on.

17 CHARACTER/DISP – Press to change the kind of information that the display shows. The choices available depend on the current function (CD, tape, etc.).

18 GUOUP +/- – Use to switch +/- remote locator.

8.2 SPECIFICATIONS

Stereo CD Tuner: XC-L11

FM Tuner Section

Frequency Range	87.5 - 108MHz
Antenna	75 Ω, unbalanced

AM Tuner Section

Frequency Range	522 kHz - 1,602 kHz(9 kHz step)
Antenna	Loop antenna (supplied)

Compact Disc Player Section

Type	Compact disc digital audio system
Usable discs	Compact discs
Channels	2 (stereo)
Frequency Response	4 Hz–20 kHz
Signal-to-Noise Ratio	110 dB (EIAJ)
Dynamic range	96 dB (EIAJ)
Wow and Flutter	Below measurable levels (±0.001% W.PEAK)
Dimensions	220 (W) x 317 (H) x 65 (D) mm (without stands and door closed)
Weight	2.2 kg

Display Unit

Dimensions	206 (W) x 50 (H) x 65 (D) mm
Weight	0.2 kg

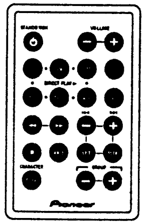
Accessories

Remote control unit	1
Lithium battery (CR2025)	1
AM loop antenna	1
FM wire antenna	1
AC power cord	1
10P cable	1
20P cable	1
Operating instructions	1
Warranty card	1

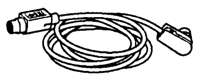
NOTE: Specifications and design subject to possible modification without notice, due to improvements.

• ACCESSORIES

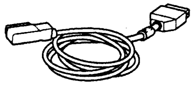
• Remote control unit
(AXD7306)



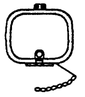
•10P cable
(ADE7077)



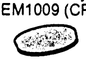
•20P cable
(ADE7057)



• AM loop antenna
(ATB7009)
(shown assembled)



• Lithium battery
[VEM1009 (CR2025)]



• FM wire antenna
(ADH7005)